

**Valuing and Encouraging Critical Reflection
In Pre-Service Teacher Education**

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Abstract

This qualitative study was designed to investigate aspects related to valuing and encouraging critical reflection in pre-service teacher education. An examination of the place and function of practicum logbooks as used at Covenant Canadian Reformed Teachers' College, a small private college which offers pre-service teacher education formed the core of the research. An analysis of the practicum logbooks written by five student teachers during three different practicum placements was performed at two levels. First, a content analysis served to identify general and specific categories within the practice teaching context as a learning experience. Secondly, in-depth intuitive and thematic analyses of the entries which related specifically to reflection as a learning experience gave rise to critical questions. Throughout the process, the five participants formed an active and involved group of co-researchers, adding their voices to the narrative of the learning experience. Variables such as personality type, learning style and self-directedness added a dimension which deepened and enriched the study. The result of the study suggests that practicum logbooks form a valuable base for valuing and encouraging critical reflection in pre-service teacher education. The results also suggest that not all students appear to be equally capable of critical

reflection. Recognizing that teacher education exists as a continuum appears to support the findings that in their journey along this continuum, student teachers not only move from reflection-on-action to reflection-in-action, but also from content to process to premise reflection. An awareness of contributing factors such as personality type, degree of risk-taking, preferred learning style and self-directedness on the part of teacher-educators will serve to create a climate of trust in which student teachers can safely develop critical reflection, using practicum logbooks as one possible medium.

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CHAPTER ONE: THE PROBLEM

Introduction

Constructivist and critical theory are but two of the approaches to education which reflect today's prevalent paradigms. Within these approaches, an emphasis on the personal, on personal knowledge, personal relevance, personal responsibility and personal voice within the context of social and societal needs embraces the notion of reflectiveness. But, do we as educators really understand the meaning and implication of reflectiveness for the teaching/learning setting? Do we understand the role reflection plays in the process of inquiry? Do we know what reflection looks like in action? How it functions dynamically in the life and work of experienced teachers, novice teachers, student teachers and students?

This study proposes to examine the notion of valuing and encouraging critical reflection in pre-service teacher education, with a focus on the use of Practicum Logbooks.

Background of the Problem

It is well over a decade ago that Donald A. Schön (1983) wrote The reflective practitioner, followed a few years later by its companion volume Educating the reflective practitioner (Schön, 1987). Having stood the test of time and scrutiny, both works have had a significant impact on the thought and action of teaching and learning. The term "reflective practitioner" has become a household word in the circle of educators. As is the case with many household-words-turned-buzz-words, there is a danger that these words begin to live a life of their own to the extent that the intended

meaning of the term is lost. Over time, the dynamic and emergent meaning which Schön bestowed on his reflective practitioner may well have turned stagnant and petrified. It is even possible that the intended meaning changes and disappears altogether. A reexamination of the reflective practitioner against the backdrop of today's paradigm will allow us to rediscover and experience what it means to reflect-on-action and to reflect-in-action.

Statement of the Problem Situation

Within the context of inquiry which characterizes all teaching and learning settings, critical reflection is an important element in exemplary teaching. Critical reflection is to be valued and encouraged at the pre-service setting in teacher education. Reflective experiences at the pre-service level are intended to bring about some form of change in the established beliefs held by student teachers. Reflective experiences may also achieve a form of change in the way of thinking about teaching and learning as student teachers prepare themselves for the teaching task.

Purpose of the Study

The purpose of the study is to determine the function of practicum logbooks as a means to value and encourage critical reflection in student teachers. As a result of this study, the participants in the study specifically, as well as teacher educators generally, will gain a deeper understanding of the rich experience critical reflection brings to bear on the process of inquiry in pre-service teacher education.

Questions to be Answered and Objectives to be Investigated

In examining the premise of valuing and encouraging critical reflection at the pre-service setting of teacher education, the following questions were asked in the preliminary stages of this qualitative study:

Can we describe reflective practice in pre-service students?

How do we value reflective practice in pre-service students?

Are all students capable of critical reflection and reflective practice?

Can knowledge of pre-service students as learners (e.g., personality type, risk-taking, learning style or self-directedness) "predict" the degree of reflective practice?

How do we encourage critical reflection in pre-service students?

Importance of the Study

The topic of valuing and encouraging critical reflection in teacher preparation is a timely one. In the province of Ontario, the proposed changes in teacher training and the emphasis on continuing professional development of teachers are only two of the recommendations currently under discussion. Reports such as "For the love of learning: Report of the Royal Commission on learning" (Bégin & Caplan, 1994) and "The privilege of professionalism: The Ontario College of Teachers" (Ontario College of Teachers Implementation Committee, 1995) point to changes in teacher education at the pre-service and in-service levels, and recognize the importance of reflective practice.

An immediate personal relevance of the study relates to the work done at Covenant Canadian Reformed Teachers' College in Hamilton. As an instructor at this College, I am closely involved in the effort to provide pre-service teacher education for students who have chosen to teach within the Canadian Reformed family of parental Christian day schools. This study itself is a reflection of my own desire to be a thoughtful and reflective practitioner.

In addressing the questions relevant to the role of critical reflection in the learning process of student teachers, it is my hope that a renewed understanding of what it means to be a thoughtful, reflective practitioner will be gained. Valuing and encouraging critical reflection in pre-service settings of teacher education will have an impact on our understanding of the role of the faculty, the role of the student, and the nature of the program and methodology.

Definition of Terms

Inquiry - An ongoing and personally active process of learning, a becoming aware of being and becoming. Inquiry is like an ever-extending spiral of reflective practice, deepening and enriching at every turn it takes.

Mentor Teacher - In this study, the term refers to a classroom teacher who has agreed to function as an associate teacher, a model and a mentor to the student teacher. In the family of Canadian Reformed Schools in which this study was conducted, mentor teachers have at least 2 years of full time teaching experience, and are recommended by their principal for the task of mentoring a student teacher. Mentor teachers do not

receive specific training, but are encouraged to attend the workshops conducted regularly by the faculty of Covenant College.

Narrative Inquiry - The act of giving voice to one's learning. Although such a narrative may occur in the form of "telling one's story," it is not restricted to story.

When people are engaged in narrative inquiry, the words they use may be part of a story-in-progress, as yet without a predetermined or clearly defined plot.

Practicum - In this study, the term refers to a two- or three-week session during which the student in the pre-service teacher education program becomes a student teacher at an elementary or secondary school. A mentor teacher is assigned to the student, and the faculty advisors at Covenant Canadian Reformed Teachers' College serve a supervisory function.

Practicum Logbook - In this study, the term refers to a journal which the student teacher is to keep during the practicum stay at the school. Prior to the first practicum placement, general suggestions are provided to explain the place and function of the practicum logbook as a means of reflection of a student teacher's learning. Students are encouraged to maintain the logbook regularly, and to use a style which suits them best. At the conclusion of a practicum, the practicum logbook is submitted to the faculty advisor assigned to the student, and forms a basis for a postpracticum discussion. The practicum logbook is part of the student's practicum file for the purpose of the overall practicum assessment.

Pre-service Teacher Education - A program of formal studies in preparation for teaching. Students in such a program of studies usually hold an undergraduate degree.

A pre-service program of studies generally includes a theoretical component in the form of course work, and a practical component in the form of several practice teaching sessions in an elementary or secondary school setting.

Reflection - The act of thinking about one's actions, motivations and thoughts. Such critical assessment of our efforts leads to new understandings and appreciation. As a result, reflection may also interpret and give new meaning to an experience (Mezirow, 1991).

In this study, terms related to aspects of reflection are used as follows:

Reflection-on-action - A thinking back on what we have done. An retrospective, after-the-fact experience which helps shape future action (Schön, 1987).

Reflection-in-action - A reflecting in the midst of action, without interrupting the flow of the action itself, and within the context during which we still can make a difference. "Our thinking serves to reshape what we are doing while we are doing it" (Schön, 1987, p. 26).

Content Reflection - An examination of the content or description of a problem. It flows from the "what" type of questions. E.g., "What would you like to improve?" (Cranton, 1994, p. 170).

Process Reflection - The learner stops to think and examines the process of the problem. The "how" type of questions often lead to process reflection. E.g., "How did you come to see yourself as. . . ?" (Cranton, 1994, p. 171).

Premise Reflection - The learner raises questions around the problem itself. Typically, the "why" type of questions encourage premise reflection. E.g., "Why do you want to

learn that?" (Cranton, 1994, p. 172).

Critical Reflection - The type of thinking which serves to challenge notions of prior learning. The patterns of a person's beliefs, goals or expectations may be put to the test by means of thoughtful questioning.

Reflexive Practice - A way in which one reflects on the practice of reflecting. A turning back on oneself to consider, questioningly, the validity and principles of the practice (Lather, 1991, p. 83).

Transformative Learning - Transformative learning occurs when the learner critically assesses efforts to interpret and give meaning to an experience. A change in perspective which occurs as a result of such an assessment forms an essential part of transformative learning and is considered one of the goals of adult learning,

Scope and Delimitations of the Study

In order to do justice to the topic of valuing and encouraging critical reflection in teacher education, one would ideally trace a group of students at all stages throughout the course of their pre-service training and well into the first 2 years of teaching. One would also maintain close contact with all those who play a significant role in this process: mentor teachers, colleagues, administrators, etc. However, time constraints and the potentially vast amount of data make such a project cumbersome and prohibitive for the intended purpose.

In describing only a part of the pre-service year, this study is bound to the natural restrictions of availability of time, space and individuals. Narrative inquiry

used in this setting at best approximates an action frame frozen in time.

The research described in this study is intended to provide a small window into the topic of valuing and encouraging critical reflection in teacher education.

Outline of Subsequent Chapters

Chapter 2 provides a review of the relevant literature for this study. The literature review employs an approach which moves from the general to the specific and focuses on reflective practice which leads to promoting a spirit of inquiry against the broader background of teaching and learning.

Chapter 3 describes the methodology of the study. The research paradigm is discussed and methodological assumptions are presented, followed by the description, justification and implications of the research design. A description of the participants is presented, as are the instrumentation, data collection, recording, organization and analysis. The text employs the third person when referring to the general description of the methodology and research design. In an attempt to show immediacy and relevance in this research, the text switches to the first person when describing the methodology and design specifically used for the purpose of this study.

Chapter 4 presents the findings of the study. The qualitative data are presented, discussed and interpreted by means of tables and text. Throughout the chapter, great care is taken to represent the voices of the participants. In order to achieve this, the narrative is in the third person when reporting the findings, where the researcher takes a "from-the-outside-looking-in" approach. However, the researcher's

role as a "researcher-as-part-of-the research," a participant-observer, results in the use of first person narrative to convey a "working-from-within" when interpreting the data.

Chapter 5 offers a summary of the study and the implications drawn from the analyzed data. Furthermore, suggestions and recommendations for the practical implementation of the findings are included, as are implications for practice and further research.

The Appendices are intended to provide a glimpse into the practicum logbooks provided by the participants. The samples are taken from the original entries written and submitted by the participants, and from the entries selected from the subheading Reflections in the content analysis process of the data performed by the researcher.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

Organization of the Present Chapter

In discussing the valuing and encouraging of critical reflection at the pre-service setting of teacher education, an examination of the literature relevant to this topic forms a logical starting point. The intent of this chapter is to provide an overview of some aspects found in the substantial and ever-increasing body of writing devoted to the place of reflection in teacher education.

Considering teacher education as the context and moving from the general to the specific, topics under discussion may be arranged under general headings such as the nature of knowledge and learning; learning as a lifelong activity; teachers as lifelong learners; nurturing a spirit of inquiry; the place and purpose of reflection and critical reflection in teaching and learning; critical reflection and teacher education; and fostering a spirit of inquiry in teacher education by means of reflective practice. The chapter concludes by examining the manner in which reflective practice may be encouraged in pre-service settings of teacher education.

Knowledge as a Context for Understanding Teaching and Learning

An examination of the nature of knowledge and learning leads to the branch of philosophy commonly known as epistemology. Epistemology addresses the nature, basis and limits of knowledge, and examines various dimensions of knowledge.

In examining the sources of knowledge, epistemology considers aspects related to sensory knowing, revealed knowledge, authoritative knowledge, reason and

knowledge, intuition and knowledge, etc. Epistemology seeks to answer questions such as, "Can reality be known? Is truth relative or absolute? Is knowledge subjective or objective? Is there truth independent of human experience? How do we know that we know? Can knowledge be communicated? How can we let others know that we know? Does such communication change the nature of our knowing?" Having given careful thought to such questions, one is not surprised to discover that epistemological considerations feature prominently in a discussion which centres around education, around teaching and learning.

In his discussion of the factors related to descriptions of the objectivity or the subjectivity of knowledge, the scientist-philosopher Michael Polanyi wrote about knowledge as personal knowledge, knowledge in which the knower participates personally in all acts of understanding. He stressed knowledge as an activity characterized by indispensable intellectual powers and their passionate participation in the act of knowing. At all times, such an act of knowing includes an appraisal which shapes all factual knowledge. The act of knowing itself bridges the disjunction between subjectivity and objectivity. In Polanyi's words, "man can transcend his own subjectivity by striving passionately to fulfil his personal obligations to universal standards" (Polanyi, 1962, p. 17).

Closely linked to the definition of knowledge as personal knowledge, Polanyi made a distinction between tacit and explicit knowing. To help us understand the term tacit knowing, we might consider the example of tacit knowledge as "one's ability to recognize a known face in a large crowd, without really being able to tell how one

recognizes such a face." Tacit knowing refers to the ability to "know more than we can say" (Polanyi, 1983, p. 4). When tacit understanding is articulated and communicated, explicit knowing occurs. Following this line of reasoning, one could suggest that every form of knowledge is a mixture of both tacit and explicit elements. This makes tacit knowledge not only a legitimate form of knowledge, but logically it occurs prior to explicit knowledge (Gill, 1993). Polanyi expressed the connection when he writes, ". . . , we may say that *we always know tacitly that we are holding our explicit knowledge to be true.*" (Polanyi, 1958, p. 12).

In the context of knowledge as personal, tacit and explicit, the place of language as a means by which we articulate what we know, plays an important role. Language as a uniquely human way of communicating functions as a thread which links the knower and the known. Using language as a thread, the educated mind has the capacity continually to enrich and enliven its own framework. As under the hands of a skillful and artistic weaver a tapestry is an ever-changing kaleidoscope of colour and texture, the educated mind is the place where new experiences mingle and mix with old knowledge, thus creating new knowledge. The awareness of this experience of constantly enriching and deepening knowledge is what learning is all about. The educated mind is an active mind and learning is a lifelong affair.

Educational Practice and the Nature of Knowledge

Against the background of personal knowledge, the notion of learning as a lifelong activity brings to bear a special meaning for educators. When examining the

implications of knowing for educational practice, Connelly and Clādinin (1985) linked personal modes of knowing and practical knowledge. Acknowledging a distinction between theory and practice, these authors suggest that modes of knowing represent the theory, while teaching and learning represent the practice. At first glance, there appears to exist a discrepancy between the two. To the practitioner in the classroom, having taught a Thursday afternoon art class, the invitation to identify the learners' acts in terms of "modes of knowing" somehow seems too philosophical. Similarly, to the philosopher pondering forms of disciplined thought, the invitation to link the results of such ponderings to the routine and rhythm which characterizes learning in a classroom setting, may seem equally discrepant. Yet Connelly and Clandinin stressed that in a study of an event such as a teaching act, a thoughtful and deliberate use of narrative (or narrative-in-action) will unify theory and practice. Such a study becomes a knowing-in-practice and illustrates that knowing and doing are reflections of one another (Connelly & Clandinin, 1985, p. 184).

Another facet of the implications of knowing and knowledge for educational practice is introduced with the term "knowing-in-action" when referring to "the sorts of know-how we reveal in our intelligent action--publicly observable" (Schön, 1987, p. 25). Closely linked to the concept of tacit knowledge, knowing-in-action occurs when knowledgeable and experienced practitioners simply "just know" as they do it. Often when a knowledgeable and experienced practitioner is asked to explain an action in detail, the response merely approaches the actual act of doing. For example, the surgeon performing a delicate operation unhesitatingly and successfully, acts from a

tacit knowing, perhaps from an intuitive sense blended with theoretical knowledge and practical experience. For the person without similar medical training and experience, imitating the surgery by following the directions provided in a most precisely written manual will likely not result in the same positive outcome. A parallel example can be imagined when observing the thoughtful and intentional actions of a knowledgeable and experienced classroom teacher and comparing these to the attempts of an inexperienced student teacher to mirror the actions exactly. The result is often a question posed by the student teacher along the lines of "I did it exactly the same way as my mentor teacher. . . Why did it not work for me?" To Schön, "*Knowing* suggests the dynamic quality of a knowing-in-action, which, when we describe it, we convert it to *knowledge-in-action*" (Schön, 1987, p. 26).

Teachers and the Nature of Knowledge

This leads us to review what it means when the epistemological perspectives about knowing and knowledge, combined with the concept of learning as a lifelong activity are applied specifically to teachers. What does "knowing how to teach" tell us about knowledge and teaching, or knowledge about teaching?

If knowing, as an activity or act, is articulated and communicated by means of language, then knowing is also social. Teachers interact with learners, and learning is characterized by communication. The difference between an experienced, thoughtful and intentional practitioner and a beginning student teacher may be illustrated by examining the approach to questioning techniques used to ascertain whether learners

have indeed achieved the intended learning (Jackson, 1986). The experienced, thoughtful and intentional teacher hears the answer provided by the learner, but listens for the voice of the learner reflected in the answer. The student teacher, on the other hand, may hear the carefully crafted question, and listen whether the response of the learner indeed matches the preformulated response of the student teacher. Do student teachers know and can they articulate what it means to communicate in a meaningful way with learners in a classroom setting?

Calderhead (1988) applied the nature of knowledge specifically to the pre-service teacher education setting. When discussing the development of knowledge structures in learning to teach, he examined what kind of knowledge is acquired by student teachers when learning to teach (Calderhead, 1988; Clandinin, 1986). In addressing this, he took as starting point a typical student teacher's personal perceptions of what it means to be a teacher. Such perceptions are often based on a student teacher's long "apprenticeship of observation" (p. 52) undertaken as a pupil at school. For some student teachers, teacher training is viewed as an extended form of parenting, requiring very little development in professional knowledge. Interestingly enough, some teacher educators do not fare much better when asked what teacher training really involves. Some suggest that classroom competence is largely a matter of personality, and that teachers are born rather than made, hinting that aside from some strategies and tips provided during teacher training, the real learning takes place on the job itself. This typical bag-of-tricks approach to professional knowledge does not concur with Calderhead's understanding of developing knowledge structures in

learning to teach. In his view, "the nature of teachers' practical knowledge--the knowledge that is directly related to action--is qualitatively different from academic subject matter or formal theoretical knowledge" (Calderhead, 1988, p. 54). This view results in a conceptualization of the professional learning process which recognizes the existence of vital knowledge bases such as knowledge on subject matter, curriculum, teaching methods, materials, and children. Linking a student teacher's conceptions of learning to teach to the student teacher's own metacognitive processes results in a dynamic interrelationship between these knowledge bases and actual classroom practice: a knowing-in-action.

Teachers as Communicators of Knowledge

In most cases, oral communication includes listening as well as speaking. Connelly and Clandinin (1988) have encouraged teachers to tell their stories. For years, the two educators have listened to such stories and realized that often the telling of a new story was actually a retelling of an old story from the past. The new stories, however, become richer and deeper as the spiral of experience winds its way through time and place. The experience of listening to old stories newly told, led Connelly and Clandinin to value classrooms as places where students and teachers tell stories to one another. Communication which involves narrative makes sense of where they as students and teachers have been. Listening to their own narrative and their own stories helps them grow and develop in the present for the future. From the source of narrative and story, new meaning arises out of old experiences. In the process, new

ways emerge; ways which lead to future action (Drake, Elliott & Castle, 1993).

In a similar manner, Bruner (1985) discusses the place of narrative as means of communication aimed at connecting the exceptional and the ordinary when giving voice to what is known. The power of narrative lies in its value-ladenness, and in the fact that "narrative is concerned with the explication of human intentions in the context of action" (Bruner, 1985, p. 100). Again our attention is drawn to the tacit dimension: "In narrative, to be successful, you mean more than you say, and treat a text or utterance as open to interpretation. . ." (p. 109). Although we do not know a great deal about the development of narrative thinking in children, we do know that the ability to comprehend stories develops or is present at a very early stage. Somehow, children at an early age use experience, real and imagined, to create their own stories. Does the very act of putting meaning to narrative create a story? Does our ever-deepening understanding of our own voice over time result in stories better told? When applied to the context of teaching and learning, does this mean that teaching is storytelling? Are teachers narrators of knowledge? Are students listeners to stories?

Another angle of the question in what manner teachers communicate knowledge is provided by Virginia M. Jagla (1994). In an effort to answer the question "What is so special about these good teachers who evoke such charged and excited responses from their students?" (p. 5), Jagla studied eight teachers whose teaching experience ranged from 2 to 30 years, and who had been recognized for excellence through awards and recommendations. When examining the practical

knowledge of such teachers, Jagla became interested in focusing on a specific type of teacher thinking and knowledge, and examined teachers' use of imagination and intuition in everyday planning and implementation of classroom activities. Good teachers are powerful communicators. Good teachers love to teach and learn. Good teachers do not hesitate to use the emotional component of intuition and imagination to bring life into the classroom and in the minds of the students. "A teacher's use of intuition enables her to use her imagination to spark excitement in the classroom" (Jagla, 1994, p. 138). Such a connection of intuition and imagination leads to artistic teaching.

When describing teaching artistry from his perspective, Schön (1987) commented on the instances in which our spontaneous "knowing-in-action" fails to serve us effectively, generally resulting in a sense of surprise or annoyance. At such times, the need to communicate such an occurrence may result in one of two actions: either we ignore the signals of surprise or we purposefully attend to the experience, examine it in detail, and turn the event into a learning experience. Such a need to communicate leads to reflective practice. In Schön's view, teaching artistry is facilitated through reflection-in-action.

Teachers, Knowledge and Reflective Practice

Linking reflective practice to concepts of professional competence was first introduced in The reflective practitioner by Donald A. Schön in 1983. Of relevance to this discussion are especially those references to the educational settings, the

interactions between teachers and students, and the act of teaching and learning.

Flowing from his concept of knowing-in-action, as discussed earlier in this chapter, Schön distinguished two aspects under the general heading of reflective practice. The first aspect dealt with "reflection-on-action," the retrospective "thinking back on what we have done in order to discover how our knowledge-in-action may have contributed to an unexpected outcome" (Schön, 1987, p. 26). The second aspect involved "reflection-in-action," a reflecting in the midst of action, without interrupting it, and within the context during which we still can make a difference. In this midflow type of reflection, "our thinking serves to reshape what we are doing while we are doing it" (p. 26). To the eye of a somewhat inexperienced observer watching a seasoned professional at work, the original act itself and the subsequent reflection-in-action which leads to a reshaping of that act occur in a seamless flow which leaves the impression of watching merely one extended act. When probed, even the seasoned professional may not be able to articulate the extended event which just occurred. "Reflection-in-action is a process we can deliver without being able to say what we are doing" (p. 31). Again, this is a reference to the tacit dimension.

The link between good teaching practice and explicit reflection was explored by Korthagen and Wubbels (1991) in a research setting of teacher preparation. These researchers suggested that good teaching exhibits characteristics which may be considered as correlates of reflectivity. Such a description of good teaching practice includes a high degree of explicit reflection. Within the specific setting of a secondary school mathematics teacher education program in The Netherlands, explicit

reflective practice is stressed. Within the context of the instructional program described in the Korthagen and Wubbels study, reflection is defined as "the mental process of structuring or restructuring an experience, a problem or existing knowledge or insights" (p. 5). Based on this definition of reflection, attributes which could be observed in student teachers enrolled in this program were identified as follows:

Student teachers had to demonstrate the ability of structuring situations and problems and considering it important to do so; the ability to use standard questions when structuring experiences; the ability of identifying precisely what he or she wants to learn; and the ability to describe and analyze adequately his or her own functioning in interpersonal relationships with others. It ought to be noted that the researchers in this study posed several questions which may lead to further research. For example, the definition of reflection which was used very specifically in the context of the Dutch teacher education program led the researchers to ask, "Which aspects are specific to the chosen conceptualization, and which are of a more general nature?" (p. 18).

Critical Reflection and Inquiry

Having introduced the idea of reflective practice using Schön's (1987) terms of reflection-on-action and reflection-in-action and having examined how this idea applies to teachers specifically, we can now move to the next stage and introduce the notion of critical reflection. However, before we examine the role of critical reflection as a means of knowing, we do well to define and describe the nature and practice of such critical reflection. In his work on theories related to learning, and more specifically

adult learning, Stephen Brookfield (1986) introduced the principle of praxis (a term referring to action and reflection, and associated with the Brazilian educator Paulo Freire). Under this principle of reflection, adult learners display a tendency "to interpret, understand, codify and assign meaning to new ideas, insights, skills and knowledge in the context of their own experiences" (p. 16). Critical reflection takes this one step further, and may be defined as the effective practice which aims to foster an attitude of healthy scepticism. In a setting in which critical reflection is valued and encouraged, learners are "encouraged to examine the assumptions underlying the acquisition of skills, to consider alternative purposes, and to place skill acquisition in some broader context" (p. 17).

Patricia Cranton (1994) placed critical reflection directly in the context of educators as transformative learners, and distinguished between content, process and premise reflection. Suggestions for becoming critically reflective are provided by means of ongoing introspective questioning. For content reflection, one could ask "**What** did I do in that course, session or workshop?," to achieve process reflection, the question could be phrased as "**How** did I decide to do that?" and to attain premise reflection, the question might be "**Why** should I question that?" (p. 221). Critical reflection is a way in which one's knowledge about knowing is enriched and deepened. It lends itself well to the ideas generally associated with a spirit of inquiry.

Perhaps a word of caution is in place at this point. For although reflective practice and critical reflection seem naturally linked to inquiry itself, the connection ought not to be a passive or automatic one. Advocating the plea that such a

connection is not to be assumed or taken for granted, Zeichner (1990) warned that reflection needs to be rooted in a solid, identifiable basis. He addressed the need for a clearly defined and reasoned educational and social philosophy as a basis for reflective teaching. Deliberate and intentional actions alone do not necessarily lead to better actions. A solid grounding in educational and social philosophy is needed (Brunner, 1994).

Critical Reflection and Teacher Preparation

A review of elements related to teacher preparation and teacher training suggests that teacher education is a continuum which extends well beyond the formal pre-service training into the first few years of teaching (Bégin & Caplan, 1994; Hare, 1993; Holborn, Wideen & Andrews, 1988). Suggestions for strong collegial support and recognition of the special strains and stresses which novice teachers experience in their first few years of teaching characterize the work of these authors. The recognition that teacher education does not stop on the day of graduation from a pre-service program has led to in-service mentoring programs in which experienced teachers work and learn side-by-side with novice teachers. Building such a community of learners functions as a scaffold for those at the beginning stages of the continuum of teacher education.

A key element to note is the manner in which such a continuum representing pre-service and novice teacher education can be described. A moving along this continuum is primarily characterized by the process of change from a "I am a student"

to a "I am a teacher" perspective. Authors who tell the stories of teachers who are moving along the continuum illustrate the patterns of growth from a pre-service student teacher to an in-service teacher (Bullough, Knowles & Crow, 1991; Chodzinski, 1993; Clandinin, 1986; Connelly & Clandinin, 1988, 1994; Jackson, 1992; Knowles, 1994). Learning as a constantly enriching and deepening experience which leads to an educated mind as an active mind is a key to teacher development and growth. It is not surprising to discover that the one feature which all authors have in common is the emphasis on lifelong learning, characterized by a spirit of inquiry.

Analyzing personal teaching metaphors often offers a glimpse into the beginning teacher's travels along the teacher education continuum. The analysis of the language itself provides a way of identifying ways in which sense is made, and traces the growth and development of knowledge itself (Bullough & Gitlin, 1995).

The influence of learning orientations on the development of reflective teaching suggests another avenue of observing a beginning teacher's development. Korthagen (1988) described the learning experiences of student teachers in a program especially designed to foster and illustrate a high degree of reflective practice. All teacher educators who participate in the reflective teaching program are committed to encouraging reflective practice in a variety of ways. Student teachers enrolled in this program have an option to stay in the reflective teaching program or switch to a more conventional program of studies. Of interest to the present study is the observation that "student teachers differ in the degree to which they prefer to learn via reflection" (Korthagen, 1988, p. 42). One of the causes cited is the learning orientation of the

student teachers. Those who are guided by internal direction and display an internal orientation, show a strong preference for learning by reflection. Those who are guided by external direction, who show an external orientation and for whom external direction and feedback from an instructor is very important, are much less successful in the strongly reflective course of study. It is not surprising to discover that several of the students who demonstrated an external orientation dropped out of the program, or quit teaching after a very brief period in a classroom. It should be noted, however, that in Korthagen's discussion, no reference is made to other factors such as the person, personality type and learning style of the student teacher which may affect a student's success in a strongly reflective course of study.

Fostering a Spirit of Inquiry by Encouraging Reflective Practice

One way in which a spirit of inquiry can be fostered in student teachers and novice teachers is by means of encouraging reflective practice. Linking the nature of knowing and the nature of learning in adult learners, several authors have elaborated on the development of the reflective practitioner within the context of lifelong learning resulting in thoughtful and intentional educational practice (Dollase, 1992; Henderson, 1992; McNiff, 1993; Mezirow & Associates, 1990; Oberg, 1988; Oberg & Underwood, 1992; Wilson, 1993). Student teachers and novice teachers who make a conscious effort to see themselves as researchers (and who in this manner also try to understand their students and their students' perspectives) quickly move away from mere pedagogical techniques, the reliance on a professional "bag of tricks." By means

of making conscious use of reflection-on-action and reflection-in-action, these student teachers and novice teachers move steadily toward a thoughtfully responsive and reflective way of teaching which is generally found in more experienced teachers (Williams, 1992).

By the time a novice teacher enters the classroom, prepared and ready to encourage the development of knowledge in the learners, the roots for reflection-in-action ought to be firmly in place. Nurturing the saplings of reflective and reflexive practice as an integral part of pre-service teacher education will foster lifelong inquiry. Several examples of encouraging reflective practice in the pre-service teacher education setting can be quoted. Volkman, Scheffler, & Dana (1992) described a teacher training program in which reflective practice is encouraged as part of the practicum experience. When student teachers assess their field placement experiences (MacDonald, 1992), the intentional sharing of experiences with peers and mentor teachers assists students in becoming self-assured reflective practitioners (Cochran-Smith, Garfield, & Greenberger, 1992).

The Manner in Which Reflective Practice May Be Communicated

The importance of fostering a spirit of inquiry by encouraging reflective practice becomes even more clear as we examine the manner by which such practice might be communicated. Narrative continues to play an important role in telling what we know about reflective practice. In some cases, writing such a narrative is intended to be a solitary task. One writes the story of one's experience, and then steps back in

order to consider questions which lead to critical reflection. Dubose Brunner refers to the language which frames and communicates the narrative of knowing as "contradictory practice" (Brunner, 1994, p. 71).

In other instances, researchers speak about the teacher as researcher and the active involvement of the students in this process. The use of response journals, for example, form a public and social setting for reflective action. "Reflecting deeply on our own experiences and those of our students, we discover that explicating and exploring dilemmas is of itself a way of knowing, . . ." (Swartz, 1994, p. 101).

The importance of valuing and encouraging critical reflection at the pre-service level of teacher education is illustrated in the writing of those who provide specific suggestions for facilitating such reflective practice.

Tomkiewicz (1991) described how writing-to-learn as a means of reflective practice is used in order to facilitate the change from a student to a teacher perspective. Such a change in perspective is considered a key moment in pre-service teacher education. Course structure and activities force students to see themselves evolving from students to thinking, rational, intuitive and decision-making teachers. Chen and Seng (1992) reported how lesson critiques are rated on reflective thinking and journal entries based on lesson episodes are evaluated on reflective writing.

Another reflective practice approach to facilitating the change from a student to a teacher perspective is by means of explicit self-monitoring and self-study. Pugach (1990) encouraged students to reflect on problems of practice experienced as real by the student teacher. Considering a range of problems, students are asked to identify a

problem in their own teaching practice, address the problem, encourage consistent change and monitor progress. Others (Holly, 1989; Knowles, Cole, & Presswood, 1994; Knowles & Holt-Reynolds, 1994; Lee & Zuercher, 1993) advocate the use of personal professional journals, dialogue journals, and personal histories as media, method and milieu for gaining insights into teacher development. Developing portfolios to capture the spirit of learning (Nettles & Petrick, 1995) becomes a natural means of assessing and evaluating a student teacher's learning (Ryan & Kuhs, 1993). However, since reflective practice encourages individuality in student teachers, the methods used ought to be flexible, personal and contextually embedded in order to provide genuine learning experiences (LaBoskey, 1994).

Summary of Literature Review

The literature review was intended to provide an overview of some of the issues related to valuing and encouraging critical reflection in pre-service settings of teacher education. Having considered the general concepts of knowledge, teaching and learning we have created a background against which reflective practice and critical reflection form key factors in the discussion of aspects related to pre-service teacher education.

In the next chapters, the ability of five pre-service student teachers to engage in critical reflection will be examined. Practicum Logbooks maintained during three practice teaching sessions will be used as a basis for interpreting the nature of critical reflection exhibited by the students.

CHAPTER THREE: METHODOLOGY AND PROCEDURES

Overview

This chapter covers the methodology and procedures that were used to complete this study. An account of the methodology, research design participants and instrumentation is presented. An outline of the data collection and analysis is provided. Methodological assumptions, justification and limitations are described.

Description of Research Methodology or Approach

Research Paradigm

In a study intended to discover and describe the role of critical reflection in the learning process of student teachers, it is essential to let those student teachers speak. As such, the paradigm chosen for this study can best be labelled as an approach that seeks to understand and emancipate (Lather, 1991). Valuing the voices of student teachers can occur only when those voices are given an opportunity to speak and when teacher educators give themselves the chance to hear them. Encouraging critical reflection in student teachers includes increased awareness of the presence of sensitive sounding boards that amplify, clarify, redirect or refocus the original voice. Such sounding boards become sensitive only in action, when student teachers and teacher educators are willing to engage in inquiry. Inquiry which is action-based in nature is characterized by reflective practice. The nature of this study is designed to value and encourage reflective practice in teacher education. Therefore, it seeks to employ a methodology in which the voices of participants are heard, valued and encouraged.

Methodological Assumptions

It would seem logical that research on valuing and encouraging critical reflection in teacher education can best take place within the context of a teacher education program. Such research must be designed to bring about change, and can be described as research in action for action. To achieve this, I have applied an action-research model (Bogdan & Biklen, 1982; McNiff, 1993; Patterson, Stansell and Lee, 1990) in which the researcher and the participants are very much part of the research setting.

Considering the importance of the practicum experience as a bridge which links theory and practice, and recognizing the importance of "lived experience" (van Manen, 1990), a phenomenological approach to the data analysis was taken. The importance of people, occurrences and issues, the contextual setting of place and time, as well as flavour of the practicum experience itself, all part of the phenomenon experienced during practicum teaching and learning, was recognized in the content analysis. It should be noted that this approach with its emphasis on the understanding of the phenomenon under study refers to the procedure of data analysis only. The notion of phenomenology as an orientation has not been applied to this study.

Description of Design

The methodological design within the context of the research paradigm to be used in this study can best be described as qualitative, emergent, and narrative.

The qualitative character of the design is appropriate in that it maximizes the

possibilities for participants to be engaged in the process of inquiry. It aims to discover, describe and value the experiences of the participants in a naturalistic setting. The primary participants in this process are the student teachers and the researcher.

The design is intended to be emergent. The significance of the emergent character of the design itself serves to highlight the fluidity found in the process of inquiry. An in-depth review of current educational literature related to the concept of reflection and teacher training did result in a catalogue of emerging themes. Although such themes served as a useful general guideline for data collection and analysis, care was taken not to predetermine the outcome of the research. Common themes led to the formation of anticipated research questions used in discussions and interviews and served to guide data collection. However, as the data emerged, these foreshadowed questions (McMillan & Schumacher, 1993) were reformulated in the field during subsequent data collection and analysis.

The design recognizes the importance of narrative inquiry. In encouraging participants to tell their stories, we not only hear their voices but we also value the importance of their personal accounts--especially when those accounts illuminate issues that have contemporary significance (Lancy, 1993). These thoughts are found in discussions around the concept of "knowing," and address the ways in which we think and know. Polanyi (1962) spoke of personal knowledge, and stressed the need for a personal commitment in the act of knowing. We must know that we know, we must be critically conscious of consciousness. Such a tacit knowledge undergirds our knowledge about the world, the explicit knowledge we share with others.

Bruner (1985), having described the logico-scientific or paradigmatic mode of thinking as found in the positivist approach, discussed the narrative mode as an alternate way of knowing. Centred around the question of the meaning of experience, the narrative mode was described as a mode which operates by constructing two landscapes simultaneously: the landscape of action involves intention, goal, situation and instrument, while the landscape of consciousness concerns itself with what those involved in the action know, think, or feel. The power of the narrative mode lies in its recognition that both landscapes are essential and distinct (Bruner, 1985, p. 99). In a design which honours the narrative, the process of collecting, analyzing and discussing data gleaned from the stories told by participants allows the researcher to experience the richness of discovering the existence of the two simultaneous landscapes.

In summary, the focus on the qualitative, emergent and narrative qualities of the methodological design is selected intentionally and deliberately to enhance the valuing and encouraging of reflective practice in teacher education.

Justification of Design

A methodological design which is qualitative, emergent and narrative in character echoes the thinking found in naturalistic and constructivist inquiry. Placing the design in the context of this paradigm means that there are ontological as well as epistemological implications. Reality is viewed as a social and therefore multiple construction, and its pattern theories are expressed in terms of time- and place-bound

knowledge (Lincoln, 1990). The epistemological position in this paradigm stresses the interactivity between the researcher and the researched. Eliciting the voices of all participants is a recognition of multiple realities constructed by the participants and grounded in the particulars of personal experience (Lincoln, 1995). Instead of silencing the personal knowledge of participants, thereby creating distance between researcher and subjects, all participants savour "epistemological empowerment," a "strong sense of the integrity of one's processes of constructing meaning" (Oldfather, 1995, p. 132).

Valuing and encouraging reflective practice at the pre-service teacher education level seeks to celebrate such an epistemological empowerment which embraces understanding and emancipation.

Implications of Design

In describing the methodological design is implied the acknowledgment that within the context of research, there exist modes of thought which are irreducible (Bruner, 1985). Recognizing the existence of different modes results in the realization that each mode of thought has its own operating principles, its own criteria, and its own ways of filtering, organizing and analyzing the perceptual world. The decision to work within a chosen paradigm implies that every act associated with inquiry is affected by that paradigm.

Constructivist thinking and narrative inquiry are time- and place-bound ways of knowing. Both deny the existence of value-free or neutral inquiry. In fact, both view

the value-ladenness which is intrinsic to the methodology (Guba, 1990) as a deepening and enriching dimension of inquiry.

Placing the topic of valuing and encouraging reflection in the context of the time- and place-bound nature in constructivist thinking and narrative inquiry leads quite naturally to an interpretive approach. The narrative that results from the practicum logbooks used as a primary data source, provides a sound basis from which to do research based on grounded theory and an analysis that is grounded in the lived experiences of individuals. Recognizing the importance of voice which emerges from a lived experience and gives meaning to that experience, is a key factor. Valuing and encouraging reflection in the participants honours the lived experience of the learning which occurs in action-based research in teacher education.

Description of Participants

This study was conducted with students presently enrolled in the pre-service programs offered at Covenant Canadian Reformed Teachers' College [C.C.R.T.C.] in Hamilton, Ontario.

Covenant Canadian Reformed Teachers' College is a small, private Christian institution and is closely affiliated with the Canadian Reformed Churches. It offers pre-service teacher training specifically intended and designed for those students who plan to teach at one of the private, parentally supported Canadian Reformed Schools in Canada. Covenant Canadian Reformed Teachers' College does not have a degree-granting status, and is not formally recognized by the Ontario Ministry of Education

and Training. However, several graduates who teach out-of-province, have been granted system-restricted provincial qualification status.

Founded in 1981, Covenant Canadian Reformed Teachers' College has a faculty of three full-time and six part-time instructors. It has a student enrolment of approximately 20 full-time students annually. Due to the small student body, students complete their studies in small cohort groups.

Currently, two distinct programs of study are offered at this teachers' college. The program leading to a Diploma of Education is a 1-year program for which successful applicants are required to have an undergraduate degree. The program resulting in a Diploma of Teaching is a 3-year program for applicants who have successfully, and with high standing, completed at least six OACs [Ontario Academic Credits]. Both programs feature selected courses grouped in clusters as follows: Academic Studies [English literature; children's literature; French], Curriculum Studies [art, language arts, math, music, physical education, reading, science, social studies], Educational Psychology [learning theory; child development; learning disabilities], Education Studies [history & philosophy of education; curriculum design;], Religious Studies [bible history; church doctrine; church history; ethics].

The five participants chosen for the purpose of this study, are currently enrolled in the 1-year Diploma of Education program.

Participants: Justification & Limitation

As a full-time instructor at Covenant Canadian Reformed Teachers' College within the context of action-based research, my selection of these students as participants in this study is one of personal relevance first of all. My own premise is to be a reflective practitioner who values, maintains and encourages a spirit of inquiry at all times. What better place to do one's research than in one's own immediate workplace? Daily, immediate and close contact with students and colleagues will undoubtedly facilitate the communication required in this study, as well as the collection of the data.

Patti Lather reminded us that in all inquiry, it is important to recognize the value-ladenness which characterizes inquiry. Ways of knowing are inherently culture-bound and perspectival. The necessity of self-reflexivity, of growing awareness of how researcher values permeate inquiry must be recognized (Lather, 1991, p. 2). This thinking is often linked to critical research and liberatory pedagogy, yet it is also applicable to the researchers involved in the present study. As a Christian instructor, I bring to bear my Christian values, not only in my teaching but also in my research. The same can be said for the student teachers who participated in this study. Their choice to seek teacher training specifically intended and designed for those who plan to teach at a Christian school not only led them to enrol at Covenant Canadian Reformed Teachers' College, but also shapes the way in which they think about knowing, teaching and learning. These factors will undoubtedly colour the value-ladenness of the action-based inquiry.

In keeping with accepted research practice, the Informed Consent Form assures the participant that participation is completely voluntary and the student may withdraw from the study at any time without penalty. Yet, even within this framework, the relationship between researcher and participant can never be isolated completely from the relationship between instructor and student. In an instructional setting, a closeness between instructor and students is positive since it serves to strengthen the context for learning. However, when viewed from a strict research point of view, such closeness may have some negative side effects. For example, a built-in question of power must be recognized: after all, the instructor-cum-researcher is the one who determines the student-cum-participant's final mark in a course. Considering this, could it be that one or more students feel somehow compelled to participate? Could this affect the data they submit?

The unique setting in which the research took place ought to be considered.

Per definition, the character of the programs offered at Covenant Canadian Reformed Teachers' College is different from most pre-service teacher education programs offered at other institutions of higher learning. Although the common feature is the pre-service preparation for teaching, the program offered at Covenant Canadian Reformed Teachers' College's is intended to prepare teachers for a teaching task in a specific family of schools. This results in an emphasis on common purpose and commitment which is shared among faculty and students alike. In short, a strong sense of community characterizes this institution. The specific findings are unique to this group of students, this faculty and this family of Christian elementary and

secondary schools. However, in keeping with the qualitative nature of the methodology employed in the course of the research, the general findings of the study are portable in nature, and may be transferred to other contexts.

Instrumentation

The intent of identifying genuine themes which emerge from the participants shaped my decision with respect to the sources of data. I consciously tried to obtain data which retain the richness of the student teacher's experience without imposing my notions of critical reflection. To this end, I used the students' practicum logbooks as a primary source of data.

For many years, our College has set the practicum logbooks as a prerequisite for practicum file completion. During each practicum placement, student teachers are asked to keep a daily logbook as a means to link theory and practice. In keeping with the general function of a logbook as a record of progress made, student teachers are encouraged to describe the experience of their learning in terms of the events which occur in and around the practicum placement assignment. A special emphasis is placed on attempting to describe one's own learning by noting the learning (or lack of it) that occurs in the students in the practicum classroom setting. At the end of the practicum, the logbook is submitted to the College faculty member who is in charge of the student teacher's practicum work. In the follow-up discussion between the faculty member and the student teacher after the completion of the practicum, the logbook functions as a focus for the discussion. Student teachers are asked to sum up the

learning, and encouraged to set specific targets for the next practicum experience.

This standard procedure of logbook writing allowed me to obtain and examine logbooks without asking students to write these for my purpose. This emphasis is an important one with respect to my relationship to my students. My role as researcher is not separate from my role as instructor. This in turn brings with it the usual power-related baggage found in the instructor/student relationship. I wanted to deemphasize the questions naturally asked by most students "What should I write? What is she after? What does she want (me to say)?" Failure to recognize this instructor/student relationship may well lead to sanitized, carefully worded, even "censored" text. Throughout the study, I endeavoured to avoid dual conversations: the real one which takes place inside the head, and the carefully translated one which is audible. Since I am after obtaining "true voices" in the narrative of the participants, I want to use material which flows directly and naturally from the teaching/learning setting at our College as data for this study.

Data Collection and Recording

From the beginning of the 1995-96 academic year, the students at the Covenant Canadian Reformed Teachers' College were not only aware of my intended research plans, but also very interested in the weal and woe of the learning journey of one of the instructors. By means of the informal discussions in and around the student lounge, as well as within the context of the formal instructional settings, students shared their support and encouragement.

All students read and signed the Informed Consent Form, and expressed interest in participating in the study in some way.

The Practicum I logbooks of the 18 students enrolled at Covenant Canadian Reformed Teachers' College were collected, read and analyzed using content analysis. Logbook entries were sorted into the very general categories of people, places or contexts, objects, happenings, and issues.

From the logbooks submitted by the 18 students, the logbooks of five students were selected for further in-depth analyses. One of the main criteria for selecting these students stemmed from my desire to work in the action-research mode of research: the five students form a Teaching Workshop class which I teach several times a week. As instructor, I have built a good rapport with these students over the course of the first and into the second semester of the academic year. This allows me to initiate discussions quite naturally, including discussions which pertain to the learning experienced in practicum settings. In doing this, I operate in a action-research setting: as an instructor-as-researcher working with student teachers-as-researchers. The five students have similar academic backgrounds in that all five have successfully completed an undergraduate degree study program at a Canadian University. Although they had not all met before coming to Covenant College, from the very beginning of the academic year they have displayed a strong sense of peer interaction, academically as well as socially. Based on my limited 3-year experience as a full-time instructor at Covenant College, I consider these five students to be quite "typical" of student teachers at the pre-service level. However, when viewing the five

individuals operating as a group, I term this class as laid-back, almost reticent in nature. In instructional settings, the feedback provided by them to me is subtle and often nonvocal. Generally, some prompting and prodding on my part does result in a vocalized (and generally positive) response by the students. In this respect, my two full-time colleagues, both with many more years of teaching experience than I have at this level, share my sentiments about this class.

The logbooks kept by five students (Tracy, Linda, Tanya, Mike, and Julia) during their Practicum I, II and III placements constitute the basis of this study. Practicum I [October 2-13, 1995] and II [November 6-17, 1995] consisted of 2-week placements, and Practicum III [January 22-February 9, 1996] formed a 3-week placement. In order to experience a variety of teaching/learning settings, each student teacher worked in different schools, with different mentor teachers and at different grade levels in each of the three practica.

At the end of each practicum, each student provided a copy of the logbook, which in turn I photocopied. Individual lines were counted and labelled for ease of future reference. The originals were returned to the students, and the photocopies were stored in a secured location to ensure confidentiality.

Additional data which reflect the learning process of the five participants were obtained from sources other than the practicum logbooks. Interviews, learner profiles provided by the participants and fieldnotes prepared during group discussion settings as well as entries taken from my own journal, have added to the manner in which the participants made their voices heard. Extensive notes were taken during group and

personal discussions, and materials received in audiotaped format were transcribed fully prior to analysis.

In the course of their regular studies throughout the year, participants completed instruments intended to provide additional insights into personality type, learning style and the degree of self-directedness. The P.E.T. Type Check (Professional Effectiveness Technologies Inc., 1994e) was used to determine personality type, the Kolb Learning Style Inventory (Kolb, 1984) was applied to describe the participant's learning style and the Guglielmino Self-Directed Learning Readiness Scale (Guglielmo, 1977) served to measure an individual's current level of readiness to engage in self-directed learning. These three instruments used are considered to be standard instruments which have been described and validated in current educational literature. Since in the context of the present study these instruments were used in a very general way to describe the participants rather than measure the participant's learning, detailed descriptions of the instruments and explicit references to reliability and validity are omitted from the body of this present study. However, a brief summary description of the instruments used in this study can be found in Appendix A.

Data Organization and Data Analysis

A careful reading of the Practicum I logbooks of all 18 students registered at Covenant Canadian Reformed Teachers' College served as a sieve to sift the data in order to confirm the presence of generic categories. In the context of content analysis

(Bogdan & Biklen, 1982; Marshall & Rossman, 1989), such categories might be labelled as people, places/contexts, happenings and issues. The question was whether such categories are indeed applicable to the data emerging from practicum logbooks. In a class setting, I presented the categories to the five participants and together we discussed whether these categories adequately represent the learning that occurs in a practicum setting. During the discussion, the point was raised whether a further subdivision of categories might be helpful to capture better the learning experienced during a practicum. For example, under the category "people," one could make the distinction between teachers (mentor teacher, colleagues, principal, college instructors, etc.); students (the class as a group, small groups within the class, individual students, students from other grades, etc.); and "other" (parents, parent-volunteers, school nurse, busdriver, custodian, etc.).

As a result of these discussions, we settled on three main categories, each with several subheadings: 1- People (Students as a class, as learners, as individuals, Personnel - Mentor Teacher, Principal, Staffmembers, Other, College Faculty); 2- Occurrences and Issues (Personal-non school, Management & Discipline, Curriculum, Instruction, School Policy, Places and Contexts); 3- Comments and Reflections (Observations, Theory & Practice, Reflections).

Before analyzing the actual content of the logbook entries, an examination of external aspects of the logbooks was conducted. Appearance (handwriting, legibility etc.), length (of individual entries, the logbook in its entirety, variations in length of entries), and language (objective, neutral, passionate or personal).

\ For each participant, I analyzed the content of the logbooks kept for Practicum I, II, and III in three different ways. First an in-depth Content Analysis in which entries were underlined using a colour-coded legend which represented the pre-determined subheadings under the three main categories discussed earlier. I then prepared a list to summarize the findings in each of the categories. Finally, a matrix indicating a comparison of the number of entries found in each of the categories across all three practicum placements was prepared for each of the participants.

Next, in keeping with the theme of this study on valuing and encouraging critical reflection in pre-service teacher education, an in-depth analysis was applied to selections taken from the Reflections entries in the logbooks. In order to provide the reader with a sense of the flavour of these entries, the raw data, in the original, uncorrected form, have been included in the analysis section found in Chapter 4. The in-depth analysis consisted of an Intuitive Analysis followed by a Thematic Analysis. In turn, the two types of analyses gave rise to critical questions flowing from the data selected from the logbooks.

I applied an Intuitive Analysis in which I aimed to "translate" the voice of the participant using my own voice. To guide my analysis, I allowed the themes to emerge against the background of my own experiences as a teacher in an elementary classroom, as well as my recent role as an instructor in the pre-service teacher education setting. I also viewed the entries provided by the participants using the descriptions found under the two kinds of reflection, reflection-in-action and reflection-in-action (Schön, 1987) and the three types of reflection commonly labelled

as content, process and premise reflection (Cranton, 1994). Another window which guided me in the Intuitive Analysis was provided by the descriptions gleaned from the instruments used in the personality type (Professional Effectiveness Technologies 1994a; 1994b; 1994c; 1994d) and learning style (Kolb, 1984). Again, I prepared for each participant a summary of what I thought the learning of that person was all about. Not wanting to run the risk of sanitizing or reducing the learning of the participants by "translating" their voices into my voice, I invited each participant individually to review with me the findings and add any possible missing links. I took notes during our conversations, and allowed the conversation to be another way to let individual voices speak and be heard.

Thirdly, I engaged in a Thematic Analysis based on the same selections taken from the Reflections entries in the logbooks. From the entries, I examined the themes that emerged out of this category. I did this twice: First I simply identified themes by describing them, secondly I identified the themes against the background of the teaching/learning context found in classrooms and schools. Within this context and while recognizing the variations in practicum placements, I also looked for indicators of growth or progression as recognized and described by the student teacher between the first, second and third practicum.

Next, I rearranged the individual logbook entries in order to establish patterns that were common to all five participants. I sorted the entries quoted under the content analysis and the thematic analysis to identify themes which were present across all practicum experiences described by all five participants. From this, based

on the content and thematic analyses, critical questions begin to emerge.

This is a firmly grounded analysis, since each theme is directly linked to the content analysis, which in turn is directly linked to the entries taken from the three logbooks provided by each of the five participants. The analysis is therefore grounded in each of the participants' description of lived experience as lived and experienced during the three practicum placements.

Throughout all stages of the process, I also practised reflexive thinking, a bending back over oneself. I aimed not to impose my views or expectations from the practicum experiences. This was especially important in the cases where I visited the student teacher during the practicum placement. Using a dialogue format, I maintained regular contact with the five participants. At those times, I would share my own frustrations and small triumphs experienced throughout this research format. I also shared my thoughts on their learning as reflected in the entries taken from the practicum logbooks. I tried to encourage the participants to trust themselves in their own learning, something which they not only found very difficult, but also very new and scary. In encouraging and supporting them throughout this process, I tried to communicate to them my respect for the richness of the practicum experiences as lived and experienced individually and personally by each one of the five participants.

Initially, some follow-up discussions (either individual or group, either formal or informal) were held with the intent to ascertain whether this richness had been captured. However, especially at a point early in the course of the study, I experienced these discussions as hampering and detracting from the process.

Occasionally during such discussions, participants began to second-guess themselves and their experiences by trying to figure out what I was after. Rather than trusting in the richness of their own experiences, participants began to bend their experiences to fit the mold they felt matched the mold I wanted. In the course of time and as trust between instructor/students or researcher/co-researchers developed, it was gratifying to see how learning to trust oneself as a learner became an important and recurring theme. Personally, as researcher/co-researchers, to live the experience of shifting from a "banking notion" toward a "problem-posing" (Freire, 1981) approach to learning, added a rich as well as enriching dimension to the study. A similar experience was noted, shared and enjoyed by all participants during our final formal discussion well after the third practicum placement.

Data: Justification and Limitation

The question of credibility as it relates to the data collection, recording, organization, and analyses, as well as to the overall findings of the study must be addressed in terms of design itself. A clear description of the parameters of the setting, the population and participants and the theoretical framework is necessary in order for the research considered to be valid within such parameters (Lincoln & Guba, 1985; Marshall & Rossman, 1989).

The rich data which flowed from the total of 15 practicum logbooks posed a problem of selectivity. In order to remain succinct, not all entries could be included and choices had to be made. The key concept of reflective practice became a

guideline for making the final selections of the entries entered into Chapter 4 of this study. By means of a group discussion followed by the submission of written feedback, care was taken to ensure that the chosen selections represented each individual student in a real and fair manner.

In addressing the matter of replication, the very choice of a qualitative approach to the study, implies that replication of the study is not possible. This ought not to surprise anyone. Precisely when learning is considered to be a process and the learning in a teacher education setting is viewed as a continuum, then it is impossible for anyone to repeat such a process of inquiry. However, in following procedures, protocol and design, the process of the study can be repeated in a different setting with a different group of participants.

The notion of trustworthiness is addressed in detail by Marshall and Rossman (1989). Based on this notion, related issues in the study can be addressed by closely examining the description of data collection and analyses, the accounting for negative instances of findings, a discussion of bias, the inclusion of field decisions which alter strategies, presence of competing hypotheses, the preservation of data, and reference to theoretical significance and generalizability (Marshall & Rossman, 1989, pp. 148-149).

In a study which values and encourages critical reflection in the learning process of student teachers, let the voices of the student teachers be heard!

CHAPTER FOUR: RESULTS AND DISCUSSION

Introduction

This chapter introduces the results of this study. Since this research was emergent in nature, and followed a methodology by which qualitative data were collected and interpreted, a summary of the manner in which the data were analyzed is presented, followed by the results and discussion of the analysis of the data provided individually by Tracy [TJ], Linda [L], Tanya [TV], Mike [M], and Julia [J], the five participants in this study.

Summary of Data Analysis Process

Analysis Level I: Content Analysis

The core of this study is the collection of 15 Practicum Logbooks which formed the basis of the data collected from the five participants. I read each logbook, and then marked and counted the lines.

The first level of analysis was the process of content analysis. However, to get a sense of potential direction prior to the actual process of content analysis, I collected and read the practicum logbooks of 13 students at Covenant Canadian Reformed Teachers' College, not including the participants. From this reading, I began to formulate categories which emerged from logbook entries.

The practicum logbooks of the five participants were collected and prepared for analysis. To protect the identities of the persons and places mentioned by the students in these logbooks, I deleted all references to full names of persons and places.

Furthermore, when the selection of an entry became unclear because it lacked context, I added a brief explanation placed within square parentheses.

Direct references to logbooks are accounted for as follows: [L3-215], for example, refers to Linda's Practicum III logbook, line 215 as counted in the original logbook submitted by Linda for the purpose of this study.

During the reading of the logbooks, categories which emerged from the logbooks were generated, using the broad generic categories of People; Occurrences & Issues; Comments and Reflections as points of departure. Each category was then subdivided using headings which reflect the interactions typical of a practicum setting. In the course of determining the subheadings, minor adjustments were made to ensure accurate reflection of the contents of the logbooks. In view of the interpretive nature of the procedure of analysis, the desire to maintain a high degree of consistency was deemed of importance throughout the process itself. In order to ensure such a reasonable degree of consistency throughout the process of interpretation, the entries fitting these categories were defined as they emerged from the data. To illustrate this, each category, its description and a sample taken from the logbook entries provided by all five participants, are provided as example:

People:

Students -as a class

-entries in which the student teacher refers to the body of students. (e.g., "The class was very excited and we had so much fun." [L3-215])

People:

Students -as learners

-entries which refer to the learning process of all or some of the students. (e.g., "This is nice, to see students with an interest in chemistry." [M2-190])

People:

Students -as individuals

-entries which refer to one specific student only. (e.g., "I was very impressed even M.[a student] was good!! FANTASTIC!!" [TV1-378])

People:

Personnel -mentor teacher

-entries in which the mentor teacher is mentioned. (e.g., "-As well, J. [mentor teacher] pointed out that while I was marking notebooks, other students would take advantage by fooling around." [TJ1-269])

People:

Personnel -principal

-entries which name the school's principal. (e.g., "Mr.G.[principal]'s review was positive! That's an added encouragement. He gave me good pointers." [J3-359])

People:

Personnel -staff

-entries in which reference is made to the staff of the school. (e.g., "The school staff I find very friendly and more or less casual, a blend of S/F [two previous practicum schools]." [TJ3-002])

People:

Personnel -other

-entries which point to adults working in some capacity within the school setting. (e.g., "The class was split in two groups, Miss S.[TA] took one group and I took the other and Mrs. Vd[mentor teacher] evaluated. It worked out really well." [L3-215])

People:

Personnel -college faculty

-entries which make mention of a faculty advisor visiting the student teacher during the practicum experience. (e.g., "My conference with Mr.V.[College Faculty] turned out to be more of a 'HELP!!' session, but I did feel better afterward." [J2-498])

Occurrences & Issues:

-personal

-entries which are somewhat personal in nature, and not directly related to the practicum teaching/learning setting. (e.g., ". . ., but when nothing positive is offered, it makes you feel awful! But nothing a 1/2 hour phone call home doesn't cure. Mom and Dad are put here for a reason, they always put bad things in perspective. But I'm going to stop now before I get upset again." [TV2-226])

Occurrences & Issues:

-management and discipline

-entries characterized by references to student behaviour which is (or is not) conducive to learning. (e.g., "Except for T.[a student] the other kids all seemed to respect my authority. Although he is submissive he still wanders." [M1-217])

Occurrences & Issues:

-curriculum

-entries which make reference to the curriculum, the overall instructional plan, for a grade within the context of the

school's curriculum. (e.g., "One group assessed the music curriculum in place as well as another curriculum and made some recommendations." [L1-291])

Occurrences & Issues:

-instruction

-entries which describe the student teacher in an instructional context. (e.g., "I introduced the lesson by inviting the students to come up to the front to listen to a story. [J1-115])

Occurrences & Issues:

-school policy

-entries which refer to a formal school policy adopted by the practicum school. (e.g., "On the way to the Winter Fair, Mr.F.[a teacher] showed me the procedures the school needs to go through to organize a school trip." [M2-155])

Occurrences & Issues:

-places & contexts

-entries which refer to events which occur outside of the regular classroom or school setting. (e.g., "Classes were shortened because of the needles." [TV3-339])

Comments & Reflections:

-observations

-entries which mention an event, without providing a personal thought or feeling about such an event. (e.g., "Today was an unusual day for both me and the kids- for the whole elementary school." [TJ2-390])

Comments & Reflections:

-linking theory & practice

-entries which refer explicitly to course content at the College. (e.g., "Can you tell me a bit about your field trip procedures here at ICS[school]? . . . I have to write about field trips for the College." [J3-382])

Comments & Reflections:

-reflections

-entries in which a student teacher reflects on an aspect of the practicum experience by providing an opinion, a reason, a suggestion for change or by questioning an experience. (e.g., "I don't know why it flowed so much better, except that I did emphasize terms more." [TJ2-151])

The process of content analysis included taking note of the number of entries under each heading and subheading for each of the three practicum settings experienced by the five participants. Tables which provide a summary comparison matrix for each of the participants may be found in this chapter in the section which deals with the Findings of the Study.

Analysis Level II: Intuitive and Thematic Analysis

In keeping with the original research question which deals with the valuing and encouraging critical reflection in pre-service teacher education, the next level of analysis aimed to provide insight into questions specifically related to this concept. Questions such as, "Can we describe reflective practice in pre-service students? How do we value reflective practice in pre-service students? Are all students capable of critical reflection and reflective practice? Can knowledge of pre-service students as learners (e.g., personality type, risk-taking, learning style or self-directedness) "predict" the degree of reflective practice?" Due to the vast amount of data generated by the practicum logbooks of the participants, I made a deliberate choice to select from the Content Analysis one heading for an in-depth intuitive and thematic analysis. Once again, in keeping with the purpose of this study, the heading chosen is the one which deals with the Comments & Reflections and specifically the entries under the subheading of Reflections.

In the process of the second level analysis of the entries taken from the Comments & Reflections category, I included sample raw (and uncorrected) data from

the Reflections logbook entries provided by each of the participants. The selection of these sample entries was guided by the premise that the data had to be rich and deep. In addition, in the data selected, the voice of the participant had to be audible. This includes specifically a select number of entries which are typical for the participant, as well as entries which stand out for their uniqueness within the overall context of the participant's writing. In other words, both the in-character as well as the out-of-character reflections are included.

The intuitive analysis of the reflections in the entries of the participants is my translation or interpretation of the voice of the participant. In interpreting these voices, I used as guidelines the broad descriptions of the "what," the "how," and the "why," which characterize content, process, and premise reflection respectively. I also took into consideration the interpretations found in discussions of General Description of Psychological Type (Professional Effectiveness Technologies, 1994a), and Learning Styles (Professional Effectiveness Technologies, 1994c; Kolb, 1984). Given my role as instructor and faculty advisor, my interaction with these five students at the Covenant Canadian Reformed Teachers' College informed the interpretive character of the intuitive analysis.

The thematic analysis of the reflections in the entries of the participants is a listing of broad themes which flow from the entries themselves.

The final step of the second level of analysis is the emergence of critical questions. The data, when placed back in the context of the intuitive and thematic analyses within the broad spectrum of teaching and learning, gave rise to questions

which transcended the content of the data itself. After a practicum experience and within the instructional setting at Covenant Canadian Reformed Teachers' College, a discussion of such critical questions may become instrumental in forging a link between practice and theory.

Tables which illustrate the second level of analysis may be found in the section of this chapter in which the findings for each participant are presented and discussed.

Introducing the Participants

Throughout this study, the emphasis on the learner as person was stressed in order to let the voice of the learner be heard. By implication, the presentation of the data, the analyses and the discussion occur within this same spirit.

The next section of this chapter introduces each participant individually, in last-name alphabetical order. A variety of sources is used, including course assignments, responsive writings, individual and group discussions, etc. The same format is used for all five participants:

- a. Introducing . . . : A general introduction of the student which include the reasons for becoming a teacher, characteristics of good teachers, hobbies and personal interests.
- b. Learner Self-Description: A personal view on one's own learning as experienced during elementary and secondary schools, as well as during undergraduate studies and the first semester at Covenant Canadian Reformed Teachers' College.

- c. Descriptive Instruments: A summary of the insights gained from sources such as P.E.T., Guglielmino and Kolb (Appendix A).
- d. Instructor's Description: My own perception of the participant as a person and a student in my classes
- e. Practicum Logbooks : An examination of the "external" features of the Practicum Logbooks prepared by the participant.
- f. Content Analysis and Summary: As described in this chapter.
- g. Intuitive and Thematic Analyses; Critical Questions: As described in this chapter.
- h. Summary Statement: A brief summary of key elements which characterize the participant as person and learner.

To ascertain the validity of the introduction, each participant was invited to read the section pertaining to the individual. Comments and feedback were solicited and where applicable, any changes were incorporated in the final text.

Tracy

Introducing Tracy

Tracy's choice to come to Covenant Canadian Reformed Teachers' College was largely governed by her desire to fulfil her "requirements to teach and to adequately prepare myself for teaching in one of our Christian schools." When asked about her views of the most important qualities of a teacher, Tracy is to the point and simply mentions that she considers "patience and the ability to maintain discipline among a teacher's most important qualities."

Although she has never taught in a formal sense, Tracy suggests that she enjoys being around children. Her main exposure to children has come from the children she or her mother did babysit, as well as being around her many (29 +) nieces and nephews.

Tracy cites the arts and humanities as areas of her academic strength, and specifically "history and other subjects which required essay writing and analysis." As hobbies, she mentions reading (especially mysteries) and drawing (particularly portraits).

Learner Self-Description

In writing about herself as a learner at the elementary school level, Tracy writes that she "never had a real problem with her schoolwork, which makes it more difficult for me think of myself as a learner." She remembers when she did something very poorly, like "failing a math assignment in Gr. 5 and a pop quiz in history in

Grade 8", as well as every A++ she received in elementary school. Tracy remembers all of her teachers, except the one she had in Grade 3, and then goes on to say, "I don't remember anything from Grade 3. Usually I'll remember something, I mean I don't remember everything from every grade of course, but Grade 3 is a complete blank. I don't even remember what room it was."

Tracy's learning in high school was a positive experience, mainly because she enjoyed taking specific subjects in greater depth. Art, history and physical education are mentioned as being interesting and focused. When writing in her Learner Self-Description about the influence of teachers in her life, Tracy writes,

I don't know if teachers really made a difference in my learning. When I hear someone talk about a teacher who changed their life or their way of learning, I can't really put myself in their shoes. There have been a couple of teachers I really didn't like, but to make a difference. . . (p. 2)

When writing about her undergraduate university experiences, Tracy's writing is much more detailed.

My university experience was by far the best. Being responsible for my own learning for its sake, not for marks to compare with others, or just to finish high school courses. . . it was totally up to me to do well. (p. 2)

She describes how her first year was spent in a state of shock, spending a great deal of time in the cafeteria learning how to play euchre. However, Tracy quickly learned the ropes: to do well by knowing what was expected by the different instructors. She became somewhat selective in attending classes and doing her required readings.

Studying for exams was when Tracy learned the most, "the material would really come together, especially theme-wise."

Interestingly enough, instructors at the postsecondary level did make a difference. "Instructors had a great deal to do with my learning in university. After a particularly USELESS prof in first year, I paid more attention to listening to what people had to say about professors. I didn't always listen, unfortunately. . ." By the same token, a professor who sparked an interest in the subject matter became a favourite with Tracy. She took several courses with someone she particularly liked, and noted "I think the main element that made a prof good for me was clarity and organization and being able to find themes in the course. I needed themes to understand the material."

Switching from the cloak of anonymity offered at a large university setting, to the exposure experienced in the setting of the small Covenant Canadian Reformed Teachers' College community was a stifling switch for Tracy. Suddenly, skipping classes became painfully noticeable, and regular in-class participation was unavoidable. Practicum placements proved to be positive learning experiences. At the end of the first semester Tracy wrote,

Because I didn't know what was expected or what was even important this year, I didn't learn very much. Learning to be a teacher is something totally foreign to me, so my learning has a different focus. I think that what would help is just knowing what is expected. (p. 3)

Descriptive Instruments

The instruments used to provide additional insight into Tracy as a person resulted in the following observations:

- a. The P.E.T. Profile (Professional Effectiveness Technologies, 1994e) indicates that Tracy shows introverted feeling as her dominant function, and introverted sensing as her auxiliary function.
- b. In terms of self-directness, using the Guglielmino's SDLR Inventory (Guglielmino, 1977), Tracy scores in the average range [206].
- c. The Kolb Learning Style Inventory (Kolb, 1984) indicates high scores on concrete experience and active experimentation. This translates into a strong preference for accommodative learning, followed by divergent learning as a distant second. The remaining two quadrants of assimilative and convergent learning are almost non-existent in Tracy's profile.

It should be noted that after completing these instruments, Tracy commented for each one "that it all depends how you read and interpret the questions or the statements. It depends on the situation and also on the mood you're in . . ."

Instructor's Description

For me, working with Tracy this year has been somewhat of a déjà vu experience: I had the pleasure of teaching Tracy at the very beginning of her formal learning in Grade 1 and consider it an honour to be part of her final(?) year of formal learning. Feeling at ease in a group is very important for Tracy, and her level of in-

class participation has increased throughout the course of the year. When asked to prepare a presentation as an educational psychology assignment, Tracy's choice of topic Shyness was a poignant and personal one. Her contributions in class show a sharp mind and keen understanding.

As faculty advisor, I observed Tracy in her first practicum in a Grade 2 setting.

Practicum Logbooks

Tracy's practicum logbooks are hand-written. The cursive script is quite consistent in appearance, but does create the impression of quickly written script which is not always easily legible. Daily entries are approximately one and a half pages per day on average for the first two practicum placements, dropping to one page per day during the third practicum. An excerpt of the logbook itself, as well as an excerpt of the Reflections found in the content analysis may be found in Appendix B. Across the first two practicum placements, the number of lines is consistent at approximately about 44 lines per day. Daily entries during Practicum III are at 30 lines per day.

To the reader, the logbooks give an impression of a personal commentary on events and conversations. Frequent use of the first person pronoun throughout the entries in the three practicum logbooks highlights this. Occasionally, the logbook entries focus on a thematic discussion based on a theme which appears to be of special relevance to Tracy at the time of writing.

A summary and comparison of the number of entries under the headings

People, Occurrences & Issues and Comments & Reflections as used in the process of content analysis is indicated in Table 1.

Table 1

Number of Entries under Content Analysis Headings - A Comparison: Tracy - Practicum 1, II, III Logbooks

People:	Practicum #: I - II - III	Occurrences & Issues:	Practicum #: I - II - III	Comments & Reflections:	Practicum #: I - II - III
Students as a class	18 - 6 - 5	Personal (non- school)	2 - 6 - 5	Observations	26 - 23 - 14
Students as learners	8 - 20 - 1	Management & Discipline	15 - 14 - 38	Linking Theory & Practice	0 - 0 - 0
Students as individuals	8 - 11 - 5	Curriculum	0 - 0 - 0	Reflections	36 - 76 - 55
Personnel Mentor teacher	4 - 15 - 29	Instruction	25 - 33 - 47		
Personnel Principal	0 - 0 - 2	School Policy	1 - 0 - 0		
Personnel Staff	0 - 3 - 2	Places & Contexts	11 - 7 - 14		
Personnel Other	0 - 0 - 0				
Personnel College faculty	1 - 0 - 4				
Total Entries:	39 - 55 - 48	Total Entries:	80 - 83 - 118	Total Entries:	36 - 76 - 55

Summary of Content Analysis: Tracy - Practicum I, II, III Logbooks

Throughout all three practicum placements, Tracy's many entries under the People category are mainly found as references to Students. These entries refer to Tracy's desire to get to know the students as people and as learners by means of establishing some personal contacts. The sense of personal "connectedness" speaks strongly throughout the logbooks. It is this sense which makes the practice teaching experience valuable and enjoyable for Tracy. The absence of such a connection with the learners becomes painfully obvious during the third practicum placement. As a result, concerns related to classroom management and discipline take up a great deal of physical, mental and nervous energy.

References to the principal, the staff, the curriculum and school policy are almost nonexistent. No explicit links between the experience in the practicum classroom and the teaching/learning at the College are evident.

Tracy makes keen observations about the work of the mentor teachers (as role models), her own performance as well as the reactions of the students. Her reflections indicate a willingness to think about her own practice, but do not yet show much evidence of reflection-in-practice. Most entries under the heading Reflections can best be considered content (the "what") and process (the "how") reflection. Premise reflection (the "why") is not obvious in the logbook entries.

As a nondiary person, Tracy admits that writing a logbook does not come naturally to her. Yet she suggests that the logbook writing experience has helped her understand herself better as a learner in preparation for the teaching task in the future.

Table 2

Reflections - Analyses & Critical Questions: Tracy - Practicum Logbooks I-III

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-A little like a performing artist in concert: Playing for "the audience"</p> <p>-Dominant function (IF) suggests a preference for working intensely with children as a way to get comfortable</p> <p>- Same as above: the setting (in staffroom - away from the classroom, with two students only) serves to facilitate "seeing and hearing" the children as learners.</p> <p>-Role of expert: making origami paper cranes</p> <p>-Process reflection which begins to lead toward answering the "why I do not like this" question (premise reflection).</p> <p>- Concern about long-term effect.</p>	<p>1-084 <i>-When I told my story, I don't know how involved I was with the class. I tried to look at all of them, but I think it was just that, looking and not seeing the individual students in front of me.</i></p> <p>1-091 <i>-Since it was my first time in front of a class, I think a lot would be better if the kids just saw me more, got more used to me, and if I was a bit more comfortable in front of them.</i></p> <p>1-217 <i>-After phonics class I had two children on my own and we read a story together in the staffroom. . . We didn't have much time but I really enjoyed having a couple of kids all to myself. I could see what words gave them trouble, and more how they <u>think</u>.</i></p> <p>1-232 <i>-I liked it [free activity time on a Friday afternoon]: it is a good way for kids to unwind after a week of school.</i></p> <p>1-239 <i>-It [making paper cranes for the students] was certainly an excellent way for me to speak individually to students and to see how they react in group situations.</i></p> <p>1-248 <i>-While I recognize the validity of this [mentor teacher's threat] I don't know whether it would be a good idea to take his pencil away. I wonder if she really did take away his pencil, whether he would have learned at all during class. Of course it could have been an idle threat - but don't kids eventually pick up on that??</i></p>	<p>- Initial concern: focus on content and methodology - not on learners yet.</p> <p>-Need to get to know the students as people in order to feel at home in the classroom.</p> <p>-Creating opportunities for personal contact and interaction with students.</p> <p>-Mentor teacher as "negative" role model also shapes thinking and helps articulate what a student teacher does not like.</p>	<p>-How will a student teacher know that she "sees" individual students?</p> <p>-Do we in our schools create opportunities which allow students and (student) teachers to hear each other's voices?</p>

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-Discovering that a teacher needs eyes everywhere</p> <p>-Reflection-on-action: suggestions for future action</p> <p>-Content and process reflection is followed by reasoning "why"</p> <p>-Personal rapport is the key not only for this student teacher but also for her students.</p> <p>-Playing the role of a real teacher</p> <p>-Again the IF's need to connect personally</p> <p>-Being accepted by the students is important.</p>	<p>1-270 <i>-While I was marking notebooks, other students would take advantage by fooling around. I'll need to keep my head up and look around more.</i></p> <p>1-283 <i>-So far so good [a review of "rules for behaviour" during phys.ed.]; the rest I thought was <u>complete chaos</u>!</i></p> <p>1-286 <i>-Next time definitely only one from each squad, and only to a certain line and back.</i></p> <p>1-288 <i>-That way I can judge their skill and behaviour at the same time.</i></p> <p>1-303 <i>-I think I need to be more authoritative: trying to get all the kids to listen to me and put away their books/colouring/toys etc. They did eventually, but not as quickly as I would have liked.</i></p> <p>1-379 <i>-We then had a lesson I didn't like so much because it seemed pretty unlinked to the previous, partially because of difficulty in handing out notebooks and paper.</i></p> <p>1-394 <i>-It also got more personal: as soon as they were within shouting distance I was yelling at them to run faster to me and it worked: they really increased their pace.</i></p> <p>1-414 <i>-[re: being in charge of a group of students during Canada Fitness Day events] I think the best part was just having the kids to ourselves, without a mentor teacher keeping an eye on me.</i></p> <p>1-419 <i>-It was almost like a day-long organized recess, so I got to interact a lot with the kids.</i></p> <p>1-420 <i>-They [students] took willow branches and were weaving them into little bracelets- almost like wreaths. I couldn't tell you how many of those things I got from the kids then.</i></p>	<p>-The art of developing a "global" view of the classroom.</p> <p>-Salvaging something good from a "bad" situation.</p> <p>-Killing two birds with one stone:management + evaluation</p> <p>-Setting one's own expectations for routines and behaviour.</p> <p>-Teaching holistically. Routines which falter hamper the learning context.</p> <p>-Independence as an important element in learning how to teach.</p>	<p>-Can one teach how to anticipate chaos or does one need to experience it before anticipation leads to developing preventative measures?</p> <p>-How does one develop "the voice" which communicates a sense of I mean what I say?</p> <p>-How do you forge the links, when these are not obvious?</p> <p>-When does the mentor teacher's presence change from a reassuring to a smothering presence?</p>

(Table 2 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
-Establishing personal contact with students who otherwise do not exhibit "real" needs	2-085 <i>-[re: playing skipping and chaintag at recess] It's not only fun, but it's a great way to get to know kids that I normally wouldn't talk to as much because they don't have problems with their work (and so not inside at recess finishing up)</i>	-All learners vie for a teacher's limited attention. By prioritizing our responding some get lost.	-Is there a tendency to ignore the students who learn in spite of us?
	2-102 <i>-I had to explain the water cycle. I think I was probably as clear as mud.</i>		
	2-110 <i>-Going around the desks it seemed that they really didn't understand the concepts very well.</i>		-How does one observe understanding?
-Noting a lack of understanding and not quite knowing what to do about it.	2-111 <i>-We took up the [science work]sheet in class so I was sure that the students had the right answer, but I wasn't really sure that they understood it very well.</i>	-Having the right answer does not necessarily mean understanding.	-Then, what does having the right answer tell us?
	2-154 <i>-Partially to help me, but also to help the students, I wrote the main points of the story on the board.</i>	-Methodology which supports teaching and learning.	
-Pragmatic: works well for both teacher and learners.	2-157 <i>-It helps me so that I don't forget any major points and so I can remember what's on their worksheets and so be sure to include it.</i>	-Linking instruction and assessment.	
	2-159 <i>-I think it also helps to focus the students because I can see that they follow along every time I hit another point that I had written on the blackboard.</i>	-Visible reminders of being on task.	
-The artist in action: pictures speak a thousand words.	2-163 <i>-But I also think that if possible I'll draw or illustrate a point from the story on the blackboard.</i>	-Inventing multiple ways of communicating the same message.	
-Reflection-on-action: Viewing the teaching/learning experience from different vantage points.	2-167 <i>-I think having something more concrete on the board not only makes it more interesting, it makes it easier to explain and to remember.</i>		-Do "non-artistic" student teachers use the board to illustrate a point?
	2-183 <i>-It seems that here in F.[Practicum school], more students stay in at lunch and recess times finishing up homework.</i>		-School policy or teacher policy? Public or private?

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
-An introvert who must extravert all day. . .Tiring!	<p>2-185 <i>-I think that kids should be outside and not have to do work the entire day long.</i></p> <p>2-192 <i>-I'm finding it tiring to be with them all the time.</i></p> <p>2-194 <i>-So far I don't feel as positive about being here as I was in S.[previous practicum school], but I can't really say why.</i></p> <p>2-196 <i>-I do like the kids, although it's an entirely different composition, maybe it's because they're slightly older.</i></p> <p>2-294 <i>-Anyway, I couldn't concentrate on anything but driving this morning, and I got to school a little later than I usually do, but I don't think it made a difference in my lesson.</i></p> <p>2-324 <i>-I think that I have to be less afraid of not following the textbook. Some of the stuff I taught in this science class was absurd. Still I don't know what H.[Mentor Teacher] wanted them to learn.</i></p> <p>2-348 <i>-I participate along with the kids- it helps me know them on a different level, and they think it's fun to have "Miss J." on their team.</i></p> <p>2-393 <i>-I had Gr.4 all to myself. Boy, I like it much better when I have the class and there's nobody watching me.</i></p> <p>2-395 <i>-I relax more and can be more myself with them, I'm not as concerned about making sure that they're all sitting like perfect little angels.</i></p> <p>2-407 <i>- It's been nice, but I still don't feel as comfortable here. Maybe because I'd have to pull more out of H.[mentor teacher] than J.[previous mentor teacher], and I'm not really the type to yak freely.</i></p>	<p>-School policy and the physical needs of young students</p> <p>-Tacit knowledge: Knowing more than we can say</p> <p>-Counting on the unexpected</p> <p>-Decision making - a matter of authority: the text, the mentor teacher or the student teacher?</p> <p>-The importance of feeling totally in charge.</p> <p>-Enforcing one's own expectations without having to second-guess</p>	<p>-Are student teachers prepared for the intensity of the job?</p> <p>-Who makes the decisions??</p> <p>-What makes one place feel more comfortable than another? Does one's sense of comfortableness affect one's learning?</p>
-For some, the drive to work is a much needed opportunity to compose one's thoughts and ease into the day			
-Again: connecting with the students as learners and as persons.			
-An introverted student teacher matched with an introverted mentor teacher. . .Yet there is the need to know on the part of the student teacher.			

(Table 2 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-The importance of first impressions to set a tone.</p> <p>-Making the best of a somewhat awkward situation brings out a go-with-the-flow quality.</p> <p>-On the one hand admiration for the mentor teacher, on the other hand a fear of bringing out that which you so desperately try to avoid.</p> <p>-Is this what is meant by teachers as life-long learners?! Then again: never say never. . .</p> <p>-Critical reflection helps one identify why things go off track a little at times. It also helps in confirming those aspects which are o.k.</p>	<p>3-004 <i>-The students however. . . they're much louder, rowdier and rambunctious. This is probably in part because they are a very smart class, but I find it somewhat intimidating nevertheless.</i></p> <p>3-007 <i>-I'm going to have to give my first detention. I know that now already.</i></p> <p>3-088 <i>-[re: a supply teacher in absence of Mentor Teacher] I have to say that it is odd trying to teach when your "mentor" is even less familiar with the class than you. Oh well. . . !</i></p> <p>3-175 <i>-Actually it turned out to be just as well. I guess my learning experience for today/this week is just what happens when a teacher misses a day or a couple of days.</i></p> <p>3-189 <i>-Boy, he [Mentor Teacher] just stops them from talking at the first peep. I don't know if I really like the way he does it all the time-- He can be kind of sarcastic with them, and that's definitely not a good thing since I'm so sarcastic myself. . .</i></p> <p>3-235 <i>-That's one thing about teaching: You get to learn all the stuff you were supposed to learn in elementary school. I finally know what the Secession of 1834 was all about!</i></p> <p>3-269 <i>-I have to admit that so far I'm not really having such a great time. Maybe it's because I'm concentrating a lot on maintaining control.</i></p> <p>3-274 <i>-It's getting on my nerves. It's not that I don't think that my lessons aren't going relatively well, but when I'm thinking about how to keep them listening, stop talking (!!!) and pay attention, it's easy to concentrate too much on that part of teaching.</i></p>	<p>-Classroom management: a big factor in teaching and learning.</p> <p>-Getting to see a different side of life in school</p> <p>-Recognizing personal characteristics which are not always in our favour.</p> <p>-Classroom management can make it or break it.</p>	<p>-Are smart classes generally noisy classes? Do smart classes intimidate teachers?</p> <p>-Do we realize that we are telling the same story all over again? Why would the understanding of a difficult concept be easier for these students?</p>

(Table 2 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-Counting down. . .</p> <p>-A form of premise reflection: connectedness is still the key which this student teacher considers of greatest importance in her quest for a successful practicum.</p> <p>-The need to create some private time and space to help one cope.</p> <p>-Putting matters into the proper perspective.</p> <p>-Identifying factors other than behaviour.</p> <p>-A stressful setting may bring out the worst in us. . .</p>	<p>3-279 <i>-I think since that part of teaching [management] is always foremost in my mind, that even when they are behaving pretty well, it's hard for me to see, because I only see what's wrong.</i></p> <p>3-304 <i>-Practicum now is over half done, and I'm having a harder time connecting with the kids.</i></p> <p>3-308 <i>-I've been thinking about why this is so. I mean, I think that I clicked with my two previous classes pretty quickly, but this time it seems separate.</i></p> <p>3-310 <i>-Before I give the wrong impression, I don't hate these kids and I don't dread going to school in the morning- I just don't connect yet!</i></p> <p>3-314 <i>-I think that part of the reason is that during the other classes there were natural ways for me to get to know the students. At recess I would play with them, get to really watch them outside of the classroom. I can't really do that with this class.</i></p> <p>3-333 <i>-I just think that during this practicum it's not really the lessons which need as much work as my student/teacher relationship.</i></p> <p>3-479 <i>-I was frustrated by the time we had lunch, and I really needed to get away from them for awhile.</i></p> <p>3-493 <i>-Boy, was I ever exhausted at the end of this [measle shot!] day- they were so hyperactive!</i></p> <p>3-494 <i>-I was glad to have this practicum over, not because the class was so awful, they weren't-- just exuberant.</i></p> <p>3-495 <i>-I don't think I like this grade level either. I'm much more comfortable at a lower level</i></p> <p>3-501 <i>-But I also picked up bad habits. It's <u>so easy</u> for me to be sarcastic, and for the first time I was sometimes sarcastic with the students.</i></p>	<p>-An all-consuming concern can make us focus on some aspects only, making us oblivious to the whole picture.</p> <p>-Opportunities for naturally connecting with the students seem to be missing in this setting.</p> <p>-Teaching/learning is much more than merely delivering lessons. . .</p> <p>-A different context may have a tremendous impact</p> <p>-Determining where one can function most effectively.</p>	<p>-Can a student teacher, within the context of only a few weeks, turn this around?</p> <p>-Do experienced teachers sense the same frustrations?</p>

Summary Statement: Tracy - Practicum I, II, III Logbooks

Throughout Tracy's logbooks, her ability to reflect-on-action is evident. Not only do the reflective statements look back on the action itself, they also provide suggestions for future action. This might be explained partially by means of the retrospective character of logbook writing. Most importantly, however, these statements provide insights in the reasoning of the student teacher. In some instances, content and process reflection begin to develop into the very beginnings of premise reflection.

In keeping with her accommodator (Kolb) learning style, Tracy makes the best out of any given situation and adapts well to unexpected changes. When reviewing Tracy's personality type, her dominant function of introverted feeling (P.E.T.) is evident throughout all three practicum logbooks in the references which stress the importance of feeling a sense of connectedness with the students. Tracy's best interaction with the children occurred away from the watchful eye of the mentor teacher. Given her strongly introverted attitude, there is the need for personal space.

When asked about her fears and trepidations prior to the first practicum placement, Tracy expressed some doubts about teaching being "it" for her and wrote,

My fears are that I can't do this, that I'll ruin lessons and that I won't have a clue what I'm doing in front of the class. At least, though in Grade 2 I hopefully won't have to worry too much about insolent, know-it-all kids!

Upon her return from her third practicum, Tracy described practice teaching to be like "riding a roller coaster- lots of waiting beforehand, the ups and downs of the ride and when it's all over, you wonder where the time went."

Tracy also shared her feelings about keeping a practicum logbook. "It's like going to the dentist- you know you have to and you know that it's good for you, but actually writing the thing is like pulling teeth.."

When asked specifically about the place and function of linking theory and practice, Tracy's response was typically to the point. "Well, I'd have to say that in my first practicums, I really avoided thinking about theory. It wasn't until I came back to school that I could think about linking the two." She also suggested that in the course of the year, one is busy thinking about the one or the other. Somehow, the effort required to understand and work with either one does not leave much intellectual energy to link the two explicitly. She writes, "The more you get in front of a class, the more comfortable you get- and you can actually think more about the theory learned at school and how it applies to teaching."

Linda

Introducing Linda:

For Linda, coming to Covenant Canadian Reformed Teachers' College meant another step closer to fulfilling her dream of "I've always wanted to be a teacher!" More specifically, Linda states that attending this college "would be a valuable experience" since she "would like to receive an education taught from a Christian perspective." Her goal is to become a teacher in a Christian school.

When describing her views of qualities of good teachers, Linda suggests that she considers "a Christian perspective to be the most important. From this perspective other important teacher qualities such as patience, understanding, kindness and determination to teach the children will surely follow."

Linda has always loved being and working with children, and spent considerable time as a volunteer teacher assistant in Grades 6/7 at an elementary school. Her role in that class was to assist the students with math. Functioning as a math tutor to two students, Linda writes, "Math has always been a strong point for me in elementary school and in high school." The experience of noting steady progress in the two tutees, leads her she to remark, "I truly enjoy teaching these children, and it is very rewarding to watch them understand and learn the material. For these reasons, I think I will love being a teacher."

Sociology, history and math are listed as areas of academic interest as well as strength. English, although enjoyed as a subject, is considered to be an area of weakness.

When asked about her interests, Linda writes, "I have many interests that go

beyond school. I am a lover of God's beautiful creation. I therefore like to hike, ski, bird-watch and play all outdoor sports." In summary, she notes "By being an elementary school teacher, I am hoping I will be able to combine all my interests in an educational manner and to God's glory."

Learner Self-Description

At the end of the first semester, Linda recorded a tape in which she described her own learning at the elementary, secondary and post-secondary levels. When speaking about her years in elementary school, Linda said,

If I think back to the elementary years, I remember myself as one of those students who always did her work - although I did talk a lot. I liked the structure of the classrooms, and I think that is why I liked math the best in elementary school. It was always very well-defined in what we had to do. Language arts in general, and reading specifically were noted as areas which provided considerable challenges for Linda throughout elementary school. Added to the fact that she was quite an able student in all other areas of the curriculum, the inability to read well was experienced as an embarrassment.

I was not a very good reader in elementary school at all, and that was quite embarrassing for me because I was good at everything else. But, by the time I reached Grade 8 I had developed skills of reading that I was definitely adequate or at the same level as everybody else. So that gave me a lot more confidence. . . I didn't like any of the subjects that involved reading - especially orally. And it took me a long time to read - although when I did

read I always understood what I read. I didn't do a lot of reading for pleasure either because I'd much rather be playing sports.

Matters did change a little once Linda was in high school. A mark-driven (gaining an extra 10%) reading incentive program was helpful in getting her to read more books. Somehow this paid off, "And I did read. And I began to appreciate a lot more of the subjects in the arts area. I really enjoyed English, even though I wasn't exceptional at it by any means." Other than her comments with respect to reading and English, Linda describes her high school experience as "more of a social get-together" for her.

Upon entering the university, learning for the sake of learning received more focus and attention. "I guess post-secondary education really made me think about education. I really enjoyed going to university and I enjoyed learning. Um, I don't think I was-, was one of- of these self-motivated learners at all." Instructors, professors and formal lectures played an important role in Linda's learning.

"I always went to class because I loved listening to the teachers lecture. They were so knowledgeable. Um, they always had good experiences to add to it, and it was easy to remember from the lectures. Reading from the textbook I found a bit more difficult. I guess -again- because my reading skills aren't the greatest.

She enjoyed courses that were well-organized and well-structured. "I always liked classes that were very well-structured and that I knew what was expected of me. Everything had to be well-stated and- and simple in that way." Soon Linda realized that although she did not dislike English, she required extra assistance in writing

essays and papers. Visiting the student writing centre on campus worked well for her. She also discovered that her favourite areas of study were sociology and history, and enjoyed doing research independently in preparation for papers.

I guess that is why I loved sociology so much. A lot of it was research essays and reflective - um,- stuff - but you still got to learn about society and about the problems that people were having. Sociology is my passion!

Definitely! - And History, my other major fit in well with that, because you are looking at the past of what people were doing - so that really helped me in sociology as well.

When speaking about the type of learning experiences which were helpful for Linda in her learning, there was a clear emphasis on a preference for practical experiences and involvement. Discussions in seminar settings were also found to be helpful. When describing a seminar setting which focused on an article critique Linda notes,

It [the seminar setting] gave you a time to reflect ----, to each other as learners ---- to see where their progress was, and you could learn from each other. One person would get this out of the article and they'd share that with everybody, and you'd get something else. And I always enjoyed picking up what other people had picked up from the article. I find myself a very- almost simple- when I read the article. I take what they say and, eh, I believe it wholeheartedly, unless I know otherwise."

Her conclusion, although a little reluctant perhaps, suggests that the learning experience which was initially viewed as somewhat of a negative one, turned into a

positive experience. "I think the seminar groups **do** help you as a learner and I am glad that I was forced to participate in them, although I would never think I would enjoy them myself!"

In describing her experiences during the first semester at Covenant Canadian Reformed Teachers' College, Linda comments on the very small size of the classes. She admits that she still prefers structure over open-endedness and says

I enjoy the classes that had the most structure still. Um, educational psychology, societal and ethical issues,- Reformed doctrine I really enjoy as well. Um-, some of the other courses that don't have a lot of structure I find frustrating because one day you're expected to do so much, and the next day it's quite lax. I find that frustrating, not knowing what is expected of me.

The atmosphere and environment are important to Linda, "I am glad that it is a Christian institution. I love the fact that we open in prayer and sing and read every morning. I find that very uplifting. And it gets you a good perspective as well on how to teach in a Christian school." In looking back over the first semester, Linda connects her task as a future teacher with her own learning experiences as she observes the importance of understanding, and acknowledges that her own views have changed and are changing. "Whereas before I thought 'Man, teach them the easiest way to get their homework done, and show them all the tricks that are involved', - and not that understanding excludes this, but understanding should definitely precede it." This is quite different from her initial perception of her own learning experiences at the elementary school,

[In math classes] here at the Teachers' College, we stress understanding

and, -- and how the concepts are developed. If I look back at my elementary years, all I wanted was the formula: just show me how to do it so I can get it done, and get it done quickly. Now I wonder if that's because the teachers did not stress understanding, or if that's all I took out of the lessons. It's hard to know. I would like to go back and see. For sure.

Descriptive Instruments

The instruments used to provide additional insight into Linda as a person resulted in the following observations:

- a. The P.E.T. Profile (Professional Effectiveness Technologies, 1994e) indicates that Linda displays extraverted feeling as her dominant function. Since her auxiliary function is only slightly more sensing than intuitive, she will likely demonstrate both functions.
- b. In terms of self-directness, using the Guglielmino's SDLR Inventory (Guglielmo, 1977), Linda scores in the average range [211].
- c. The Kolb Learning Style Inventory (Kolb, 1984) indicates a very high score on concrete experience and almost equally high scores on abstract conceptualization and active experimentation. Given this profile, the style which seems to describe Linda's learning best seems to be that of accommodative learning. Convergent learning is the second quadrant of preference.

Instructor's Description

As an instructor, I have come to know Linda as an outgoing and mature

individual, who is sensitive to the needs of others... Having had the pleasure of working with Linda during the past year, I would describe her as someone who is acutely aware of "harmony" among the people in her immediate environment, and wants to do her part in maintaining or restoring harmony. Linda expresses herself well and frequently orally, and (generally) has no difficulty formulating her thoughts. She is a caring and pleasant person who wants to be a good teacher. As a learner, Linda lets it be known that she needs to know exactly what is expected from her in terms of assignments, practice teaching expectations, etc. Detailed outlines of courses and assignments are appreciated by her.

In my role as faculty advisor, I have observed Linda in her second practicum. It is good to know that Linda's dream of "I've always wanted to be a teacher!" will come true in September as she will teach Grade 6, back home in British Columbia.

Practicum Logbooks

Aside from some entries which are hand-written, Linda's practicum logbooks are typed. The text flows quite naturally, although at times the sentence structure is a little awkward and stiff. It does not always sound like the Linda I know. Daily entries vary from less than one page per day to more than a page and a half. An excerpt of the logbook, as a sample, as well as an excerpt of the Reflections found in the content analysis may be found in Appendix C.

Across the three practicum placements, the number of lines fluctuates from 51 lines per day in the first practicum, to 25 lines in the second practicum, and 33 in the third practicum. To the reader, the logbooks give an impression of reporting. The

first practicum logbook contains detailed description of events, while the third practicum logbook is characterized by Linda's expressions of her own feelings and experiences. A summary comparison of the number of entries under the headings People, Occurrences & Issues and Comments & Reflections in the process of content analysis is indicated in Table 3.

Table 3

Number of Entries under Content Analysis Headings - A Comparison:Linda - Practicum I, II, III Logbooks

People:	Practicum #: I - II - III	Occurrences & Issues:	Practicum #: I - II - III	Comments & Reflections:	Practicum #: I - II - III
Students as a class	2 - 1 - 3	Personal (non-school)	0 - 0 - 8	Observations	34 - 3 - 33
Students as learners	8 - 9 - 35	Management & Discipline	11 - 5 - 8	Linking Theory & Practice	0 - 0 - 0
Students as individuals	0 - 0 - 2	Curriculum	5 - 0 - 0	Reflections	65 - 55 - 95
Personnel Mentor teacher	21 - 7 - 16	Instruction	119 - 21 - 103		
Personnel Principal	2 - 0 - 0	School Policy	0 - 0 - 0		
Personnel Staff	0 - 0 - 0	Places & Contexts	5 - 0 - 11		
Personnel Other	0 - 0 - 2				
Personnel College faculty	5 - 3 - 1				
Total Entries:	38 - 20 - 59	Total Entries:	140 - 26 - 140	Total Entries:	99 - 58 - 128

Summary of Content Analysis: Linda - Practicum I, II, III Logbooks

A comparison of the frequency of references under the headings People; Occurrences and Issues; Comments and Reflections; suggests that Linda's entries under the heading Occurrences and Issues occur most frequently. Especially her references to Instruction or her role in the teaching/learning process are noted due to their apparent frequency. References to Management and Discipline occur mainly in the third practicum placement. It should be noted that these entries do not refer to a management or discipline "problem," but to the importance of routines and the preventative nature anticipating events within the context of teaching and learning.

Comparatively speaking, Linda does not mention entries under People often. Mentor teachers form an exception, however. In all practicum placements, but notably in her first and third, Linda refers to the mentor teachers in their role as role models. Under the subheading Students - as learners, the frequency of entries in the third practicum stands out. Again, the context is the interactive nature of the teaching and learning act.

Few, if any, references are made to the students as individuals, the principal, the staff, school policy, linking theory and practice. Entries under the heading Personal refer to a birthday celebration during the third practicum. Curriculum entries occur in the first practicum logbook, and describe a PD Day in which Linda was invited to join the staff in curriculum discussions.

Linda's reflective entries are numerous, especially in the content and process reflection categories. Again, the first and third practicum placements stand out. Overall, the tone of the entries echoes the desire to become a better teacher by

learning from the mistakes made. In addition, there is the anticipation of the fulfilment of the "I've always wanted to be a teacher!" dream which resonates throughout the reflective entries in all three logbooks, but particularly in the entries written during Linda's third practicum placement.

Reflections - Analyses & Critical Questions: Linda-Practicum Logbooks I-III

98

(Table 4 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
Good- I'm not the only one who gets the questions from the students. It can't be me - it must be them [the students]!	<p>1-419 <i>-I will have to spend more time on instructions in the future.</i></p> <p>1-427 <i>-Again it is amazing the amount of questions Mr.V. [Mentor Teacher] received "how" to do the exercise.</i></p> <p>1-429 <i>-I was pleased to see that it was not only me.</i></p> <p>1-452 <i>-I felt the Bible story went really well.</i></p> <p>1-459 <i>-The day was enjoyable. I received many good wishes from the children.</i></p> <p>1-460 <i>-They were spectacular. I'm going to miss them.</i></p> <p>2-001 <i>-Today is Monday, November 6, 1995. It is the first official day of my second practicum. Although I was very intimidated about being in the grade eight classroom, I find myself enjoying it tremendously.</i></p>	-Routines and understanding.	
Is a relaxed feel a measure of a successful lesson?!	2-004 <i>-Today the only subject I taught was math. I was very pleased with the way this lesson went. I was more relaxed than I had anticipated.</i>	-Age and size of students are intimidating factors for beginning student teachers.	-Do these intense short-term interactions have a long-term effect?
Not knowing why a strategy works - yet deciding to keep using it. Pragmatism in action! Concrete experience is the focus.	2-069 <i>-History went better than Bible, which surprised me because it is taught along the same format. I told the story and wrote the notes on the board. I used my pre-written notes to write on the board, so I would not get lost while telling the story. This worked well, I think I will use this strategy for the rest of my stories.</i>		-How does the student teacher's comfort level affect the practicum experience? -Can methodology (storytelling) be transferred across subjects and be equally effective?
Reflection-on-action: suggestions for future action	2-073 <i>-If I could do it again I would spend more time preparing on <u>how</u> I would tell the story</i>	-The "'hindsight = 20/20" experience.	
Extraverted Sensing. . . capacity for enjoyment	2-078 <i>-I was happy that I survived the day. Now the next week appears much more bearable.</i>		
	2-079 <i>-I am having a good time even though I am apprehensive about teaching Bible and history.</i>	-Content-rich subjects are difficult for student teachers	-Do student teachers know their own limitations?

(Table 4 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
Playing the role and feeling the part = confidence!	2-083 <i>-It was an excellent day. When you get the opportunity to teach most of the subject, you feel much more confident and more like the teacher.</i>	-Importance of continuity to provide a sense of reality and belonging.	
Respect as an important element in feeling the part and playing the role.	2-084 <i>-The students in this class are amazing. They are very well behaved and attentive. They listen and respect me, which makes teaching them a very pleasant experience.</i>		-To what extent does student behaviour affect a student teacher's learning?
Reflecting-on-action: Evidence of content as well as some process reflection.	2-087 <i>-History is going much better. I am learning to be more descriptive and suspenseful in my stories. I can tell if I told a certain part of a story well, because the students use my exact words in their answers. It is very rewarding.</i>		-How does a student teacher evaluate the learning which occurs? Parroting technique?!
Noting one's own progress.	2-090 <i>-In a subject of this nature (story telling) there is always room for improvement. I was considerably pleased with my improvement, even though I have a long way to go to meet the quality of Miss J. [mentor teacher].</i>	-Mentor teacher as role model leads to setting standards and benchmarks.	
	2-095 <i>-I told them how they would be marked, and that their reasoning had to be apparent on paper to receive full marks. The students did very well. I was pleased.</i>	-Identify criteria for student evaluation: Not only the "right" answer but the reasoning behind the answer.	
Flashback: Remembering the not-so-distant past and realizing you're on the other side of the fence now!	2-105 <i>-[in phys.ed. class] I had to chuckle to myself because I felt like a drill sergeant. However, the warm-ups went well and I maintained control without a problem.</i>		
	2-127 <i>-I gave away the ending of the battle before I finished the story, which was unfortunate. I need to learn to be more suspenseful. Better next time.</i>	-Too many things at once to remember: content, methodology and execution!	
Flashback: Memories about one's own learning get in the way of teaching.	2-141 <i>-[in language arts] I read most of the chapter allowed to the students. Sometimes I am surprised at how good of a reader I can be.</i>		-Does our perception of our own weaknesses hang as a dark cloud over us?

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>Reflection-on-action can also function as confirmation. I'm o.k.</p> <p>"How can I forget that which is so close and dear to me??!"</p> <p>Accommodators (Kolb) learn by experience. An unexpected negative experience can serve to lead to a change in action.</p> <p>Hearing oneself speak: the awkward overawareness of one's own voice in a quiet room.</p> <p>Linda's dream of "Always wanting to be a teacher" is coming true</p>	<p>2-147 <i>-I circulated around the room helping the students answer the questions and giving them hints where to look for the answers. I would not change this lesson; it went well.</i></p> <p>2-162 <i>-I enjoyed the day, but I do wish I was teaching more.</i></p> <p>2-172 <i>-[re: science lesson] The second thing I would have done differently was to include God in my lesson. I am ashamed that it did not occur to me. I will definitely remember next time.</i></p> <p>2-174 <i>-Oh yes, there is one more thing I would change. I would emphasis that the questions they answered about the experiment will be marked. I would tell the students how much each question was worth. I was appalled when marking the answers. I guess since we answered them in class, the students did not feel it was important to write it all down. They will not make this mistake again when they see they marks, nor will I, knowing our human nature.</i></p> <p>2-191 <i>-My nerves and my track record were interfering with my speech. The more mistakes I made the more uncomfortable I became with pronouncing difficult words. I think I handle my mistakes well, even though they make me feel uncomfortable.</i></p> <p>2-199 <i>-It is hard to believe my practicum is over. I have enjoyed myself.</i></p> <p>2-201 <i>-Today I taught for the whole day. I really felt like the teacher.</i></p> <p>2-201 <i>- I am becoming more comfortable telling Bible stories.</i></p>	<p>-The classroom as battleground for time:mentor/student teacher!</p> <p>-During the act of teaching, matters of competing importance make us "forget" the fundamental issues</p> <p>-Again: The impact of students on their student teacher.</p> <p>-Recognizing one's own growth.</p>	<p>-Do we unknowingly encourage Freire's "banking notion" of education?</p> <p>-How do student teachers learn to handle their mistakes in front of their students?</p>

(Table 4 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
Learning by means of concrete experiences (Kolb)	<p>2-202 <i>-[re: storytelling] I think not being nervous is half the battle.</i></p> <p>2-203 <i>-My writing on the chalkboard skills are getting much better. The story went considerably well. I am learning how to keep the story more suspenseful, by not first telling the outcome, but to build the story up, leaving the students hungry for more.</i></p> <p>2-242 <i>-I really like the idea of having this [free] time on a Friday afternoon. The students have an opportunity to finish their homework, so they can enjoy their weekend.</i></p>	<p>-Teaching as performance.</p>	
The human, personal touch!	<p>2-247 <i>-I thanked the students for being such a wonderful class.</i></p>	<p>-Viewing one's students as human beings with their own needs.</p>	
A confirmation of one's ideals.	<p>2-251 <i>-The day, the week, the practicum is over.</i></p> <p>2-251 <i>-I loved my time in S. I will never forget this experience. It has made the teacher in me come alive.</i></p>		<p>-Does the effect of a very positive practicum experience last over time?</p>
New school - new context - new learning.	<p>3-001 <i>-It was a good first day of teaching, although there are adjustments that I will need to make.</i></p> <p>3-020 <i>-I felt quite bad about my poor time management, but I did not know how long it would take the children to complete their work. I also told myself at the beginning of the day that this was a grade two class and their attention span is not that long, so do not drag it out. Oh well, next time better.</i></p>	<p>-Not only recognizing one's errors but being willing to learn from them. Reflection which leads to improved action.</p>	
Fun shared between student teacher and students results in not being sure what to do next.	<p>3-031 <i>-We were having so much fun the time slid away. The next time I looked at the clock it was 3:00. I had extended problem solving right through my music lesson. I was not sure what to do.</i></p>		<p>-To what extent is there a degree of freedom which allows the student teacher to adjust the "schedule"?</p>

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
Students playing the role of teacher. Role play with a pedagogical twist.	3-035 <i>-Time management was something that I would need to watch out for in the coming days.</i>	-Identify areas for own development and learning.	
	3-050 <i>-Students loved being in the front of the class and writing on the board. I felt this was a good way to develop their oral and presentation skills.</i>		
	3-052 <i>-I felt the lesson went extremely well. They all understood and did well on their work sheets.</i>		
Identifies own learning target.	3-080 <i>-The day is finally over. I love teaching grade 2.</i>		-What do correctly completed worksheets tell about learning?
Students as teachers of student teachers.	3-080 <i>-I need to continue to watch the timing of my lessons.</i>		
	3-081 <i>-Every lesson the students teach me something again of what is effective and more importantly: what is NOT!</i>	-Positives and negatives as part of the learning experience.	
	3-085 <i>-The Bible lesson went extremely well. I taught the lesson about David and Goliath. The students were encaptured. It is a wonderful story to tell, because it has a lot of action and emotion.</i>		
Our need to be genuinely (and vocally!) appreciated by our students.	3-087 <i>-I think the students enjoyed having a Bible story taught by a different person who had a different approach. One little girl came up to me after the lesson and told me, "That was a good Bible Story." I must say that I loved it.</i>	-Student teachers have unique gifts to offer to their classes	
-Reflection = Shaping one's own opinion in spite of a mentor teacher's view.	3-095 <i>-Mrs. Vd[mentor teacher] also told me that I should not pace back and forth in the front of the room. I'm not sure on my feelings about this. In some ways I think it is good for you can see the students' eyes following you and breaks any monotony, but maybe not.</i>	-Beginning to identify one's own style - even if tentatively at first.	
A teacher needs eyes everywhere.	3-108 <i>-However, sometimes I wish there was two of me to run the class. I was so busy helping individual students that I was not watching the others.</i>	-The art of developing a "global" view of the classroom	

(Table 4 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
Recognizing the variety in children's learning within the same grade level Awareness of one's own weakness in company of others	3-166 <i>-But the stories that were produced were amazing. Some of these children are very creative, while to others the work is so daunting.</i> 3-176 <i>-I did not realize how little musical talent I had, until I had to try and lead a group of children who had a hard time carrying a tune.</i> 3-178 <i>-I followed the same structure Mrs. Vd used, but not being as talented I did have some difficulty.</i> 3-179 <i>-The students are acutely aware of my uncomfortableness with the subject material.</i>	-Meeting all learning needs across the spectrum -Structure is not all that matters! -Coping with one's own areas of weakness	-Can student teachers be expected to address all needs? How can they develop this art?
Enjoying the role of teacher.	3-198 <i>-It was neat to come back to school and all the children said, Good Morning Miss S.</i>		
The need to belong	3-199 <i>-It was a nice feeling to be part of the class.</i>		
Unrealistic expectations of one's dream?	3-224 <i>-It was the best P.E. class I have ever had.</i> 3-225 <i>-I love teaching, even though it is more work than I ever anticipated.</i>		-Can student teachers prepare themselves for the demands teaching brings?
Discussing real issues is possible- even with grade two students	3-316 <i>-I dislike marking penmanship: many of these students try really hard and it still looks bad.</i> 3-360 <i>-[re: reading discussion] The topics that arise constantly amaze me. Today we talked about blasphemy. This time is very valuable for it gives the students an opportunity to relate incidents from their daily lives into the classroom setting for discussion.</i>	-The painful aspects of student evaluation and assessment -Using and creating the "teachable moment" as one way to link theory and practice.	
Students are recognized as an integral part of teaching and learning.	3-443 <i>-I love listening to their answers and suggestions. Students always provide interesting unexpected answers. I love it!</i> 3-452 <i>-I find storytelling the best part of teaching. The students are so attentive and get so much out of the stories.</i>	-Good teachers listen for what students are really saying - not merely for their answers.	
<i>Partir est mourir un peu!</i>	3-485 <i>-The day was wonderful, but I have mixed feelings about being done.</i>		-Coping: Do student teachers need to develop a thicker skin?

Summary Statement: Linda - Practicum I, II, III Logbooks

In her quest to seek her dream of always wanting to be a teacher, Linda's practicum logbooks show evidence of steady and continuous growth. Her reflection-on-action often indicates a confirmation (e.g., "This worked well, I think I will use this strategy for the rest of my stories") or a proposed change for future action (e.g., "If I could do it again I would spend more time preparing on how I would tell the story.")

In a conversation with Linda after the 3-week practicum placement, she mentioned the presence of a special needs student whose learning needs were so drastically different from those of her classmates that she has a full-time assistant with her at all times. I found it remarkable that in her logbook, Linda did not once mention this girl by name nor describe her individual needs. When I asked her about this, Linda replied, "Yes, I know. But I did not really teach her at all."

Prior to their very first practicum session, I asked the students to share their fears and trepidations. Linda listed her fears as

1. The mentor teacher will not like me.
2. My nerves will control me.
3. I will have no control or authority in the class..

When asked to write about her practicum experiences todate, Linda wrote, "Practice teaching is like a science experiment. You practice it at home, and it works great. When you get to school, you pray like anything hoping the experiment will work, because you feel it could go either way."

About keeping a practicum logbook, her thoughts were as follows, "Writing a logbook is like discipline. You know you need it and that it is good for you and helps

you grow. However, it is painful!" She also confided that during every practicum she vowed to write in her logbook every day. Somehow, each time her promising start of daily writing faded into once-at-the-end-of-the-week writing. When asked to provide an alternative to logbook writing, Linda (who comes across as a very extraverted person who loves to talk!) suggested that it would be better to meet together as student teachers and faculty for a semiformal discussion session at the halfway mark of the practicum. "Listening to each other gives you lots of ideas about your own experiences. Sometimes you don't even think of those when you sit down to write in your Logbook at the end of a week." These observations suggest that for some student teachers (perhaps especially for the extraverted ones like Linda!), the logbook as a data source may have its limitations. This is also illustrated by the reaction I received when I asked Linda about the absence of a visible link between theory and practice.

On this topic and the fact that this is not mentioned at all in any of her logbook entries, Linda suggested,

It's not that I don't link the two. I have tried out many strategies and methodologies: discussion groups, projects, dialogues, plays, direct instruction, etc. I just didn't write about them. Also, I have realized that being a Canadian Reformed teacher is more than being a Christian who is a teacher. It is a whole approach and method of teaching.

Tanya

Introducing Tanya

Tanya's decision to enrol at Covenant Canadian Reformed Teachers' College stems from her desire to teach in the Canadian Reformed school system.

When describing qualities which characterize a good teacher, she lists the following four to be of greatest importance:

- a. An enjoyment in teaching children
- b. A strong desire to educate others
- c. A commitment to quality education
- d. A lot of patience!

As background in working with children, Tanya notes her informal interaction with children in a babysitting setting, as well as a more formal interaction in an outreach program organized by the church. She also assisted in Vacation Bible School programs.

Under academic strengths, Tanya makes note of history, English, geography, art history and music, and suggests that math and French are her weaker subject areas.

Leisure interests and activities include watching sports, reading, listening to music, working out at her health club, and spending time with friends.

Learner Self-Description

When asked to write something about her own learning, Tanya responded with a lengthy description. The opening line when describing her learning experience at the elementary school reflects a competitive spirit and makes reference to marks: "In

elementary school I was always quite concerned with getting a 'good' mark. Of course, under 80% was not acceptable to me (except in math)." She recognizes some limitations in valuing one's work in this manner, and continues "Looking back at that type of attitude I realize that it was not very healthy." She illustrates her point by providing an example, "I remember in Grade 8 that I would be terrified before a project or exam because I might fail. For a while I would take things to help me sleep!! At thirteen years old I was so concerned with getting a good grade I would be unable to relax . . ." She happily notes that for the most part she's over that!

Tanya remembers all her teachers, even her Kindergarten teacher. Events of a personal nature (e.g., a teacher bringing her new baby to school and allowing the students to hold him) have a special place in her memory bank.

Her enrolment at Covenant College has made Tanya think in much greater detail about her own learning experiences. "I try to remember how I was taught, did it work for me? I try to think of ideas that I could use as I teach. I remember things when I hear or see something that 'rings' a bell." Yet aside from the present need to want to learn from personal learning experiences, her memories of elementary school "evolve primarily around friendships and of course, fights. It seemed you could have a new best friend every day."

During the secondary school years, the picture shifts slightly. The emphasis on maintaining high marks at all costs is replaced by the desire to have fun and enjoy the social aspects of schooling. Initially, Tanya's goal was to become a lawyer, "but then I became sick of school so I decided to be a teacher instead! Where is the logic in that?" Favourite subjects included the ones which did not involve a great deal of

homework and no final exams. A part-time job also took some time away from learning and doing homework.

When summing up her high school experiences, Tanya cites Grades 9 and 12 as the best years. Adjusting easily to new teachers, new friends and a new school, the reality of losing some "old" friends resulted in the awkwardness of people she knew becoming "strangers to me now. It was uncomfortable: Do you say 'hi', or don't you? (Now things are much better. I don't even think twice if I see them--- Am I more mature?)" Her final word of advice to high school students is a resounding "enjoy it while you can!"

The university experience was much different from any other previous learning experience. In Tanya's words, "I was a number. As long as I paid my tuition they didn't care if I showed up for class or not. Thus you had to be more actively involved in your own learning." Modes of learning which proved to be most helpful for Tanya were lectures (with good note-taking on her part), group discussions ("the best way to develop ideas") and researching and writing essays (especially when the topic interested her). Exams with all the strains and stresses they bring, were not considered to be very helpful. Although, "when I study for exams (esp. history) themes suddenly emerge. Themes that I missed over the space between lectures. I always found that sort of neat. . . things would come together and they would suddenly make sense." Among the characteristics displayed by good instructors, Tanya lists organization, and teaching with a passion which makes the most mundane topics come alive, as top two.

When asked to reflect on the learning experiences during the first semester at Covenant Canadian Reformed Teachers' College, Tanya makes several insightful

observations. The initial shock in going from a large to a very small institution had a positive effect.

The biggest difference I think is that we are now encouraged to add our own opinion. I didn't really have that opportunity in M. [University] (nor do I think I ever wanted it). It took some getting used to, although it does not seem too difficult now. . . I guess you get used to it.

She refers to the more relaxed atmosphere, even during exams.

Throughout the year I always questioned whether or not I was learning anything. Now that exams are done, I can answer this. I'm learning how to teach what I know. This is totally different from my previous learning when I was trying to gain knowledge. I found myself as I was reviewing, or even when writing my exams, that I was constantly thinking "Hey, that's interesting. How would this work in my classroom?" I don't mean to say that I'm not learning knowledge because I guess in a way I am. It's just different. Teachers are trying to teach me how to teach, not what to teach. I have to come up with that myself.

Having extolled the virtues of writing exams in a relaxed manner, Tanya can't quite let go of her private exam theory and writes,

This [a relaxed atmosphere] is how it should be. However, having said that, my little voice inside me is saying that I probably failed them! Tests and exams are never that easy! Somehow, I always think I will have that voice within me. At least now it is a faint whisper--not a piercing scream!

In reflecting on what it takes to become a teacher, Tanya wonders whether theory is all that important at this point. "I'm sure theory is important, and maybe in a few years I will appreciate it more. But right now, all I'm concerned with is what I'm actually going to do in my classroom next September. I still do not know how to teach long division. . ."

In conclusion, Tanya writes, "Hopefully this is what you were looking for in my little walk down memory lane. But for now that's it and that's all."

Descriptive Instruments

The instruments used to provide additional insight into Tanya as a person resulted in the following observations:

- a. The P.E.T. Profile (Professional Effectiveness Technologies, 1994e) shows that Tanya displays extraverted sensing as her dominant function, and introverted thinking as her auxiliary function. On the outside she will display extraverted feeling. This combination of introverted thinking and extraverted feeling suggests that Tanya is different when working alone than when working with others.
- b. In terms of self-directness, using the Guglielmino's SDLR Inventory (Guglielmino, 1977), Tanya rates in the average range [217].
- c. The Kolb Learning Style Inventory (Kolb, 1984) indicates high scores on reflective observation and concrete experience. This differentiation in the profile indicates the style which seems to describe Tanya's learning best seems to be that of divergent learning. The quadrant which indicates assimilative learning is next in relative size.

Instructor's Description

As an instructor, I enjoyed getting to know Tanya as a student throughout this year. For me, Tanya has typified a learner who for many years, as a learner in the upper elementary, secondary and postsecondary settings, has operated quite successfully as an example of the "banking" notion of education as described by Freire (1981). As a "mark-oriented" learner, Tanya's desire to "do what 'the instructor wants me to do'" is high on the list of priorities, and appears to drive Tanya's approach to her work. However, lately Tanya appears to be shifting toward the "problem posing" stance, to maintain Freire's terminology. Or, to use Korthagen's (1988) phrases, Tanya is shifting from being an externally oriented learner towards more of an interior-oriented learner.

In class and in the presence of her peers, Tanya's body language tends to reflect the kind of day she is having. Some fluctuation in mood is definitely noticeable, as is the sensitivity to what others say directly or indirectly about her or about others. Tanya's emotional state with its ups as well as downs, is usually mirrored in her face and in her overall demeanour. Her contributions in class are characterized by a high degree of common sense, and her insight in the needs of young learners is appreciated by all.

In my role as faculty advisor, I have not had an opportunity to observe Tanya in one of her practicum placements.

Practicum Logbooks

Tanya's practicum logbooks are hand-written. The cursive/manuscript script is quite large and legible. The degree of consistency is not very high. It would appear that slant and neatness depend on the type of day Tanya has just experienced.

Daily entries are approximately two pages per day on average for Practicums I and II, and approximately one page for Practicum III. An excerpt of the logbook, as well as an excerpt of the Reflections found in the content analysis may be found in Appendix D. Across the three practicum placements, the number of lines fluctuates from about 54 lines per day during the first two practicums to 40 lines per day for the third practicum.

To the reader, the logbooks give a detailed account of the events which occur in the course of a school day. Personal comment is often explosive and dramatic in nature, and Tanya's voice can be heard quite clearly throughout the entries. As a matter of fact, one gets the impression that the logbook serves as a silent participant in a one-way conversation. A summary and comparison of the number of entries under the headings People, Occurrences & Issues and Comments & Reflections as used in the process of content analysis is indicated in Table 5.

Occasionally in the course of the entries, Tanya lets it be known that writing diaries or journals is definitely not her favourite pastime. It is not surprising to note that logbooks suffer the same fate.

Table 5

Number of Entries under Content Analysis Headings - A Comparison: Tanya - Practicum 1, II, III Logbooks

People:	Practicum #: I - II - III	Occurrences & Issues:	Practicum #: I - II - III	Comments & Reflections:	Practicum #: I - II - III
Students as a class	0 - 1 - 3	Personal (non- school)	1 - 4 - 25	Observations	12 - 0 - 9
Students as learners	12 - 6 - 5	Management & Discipline	14 - 3 - 24	Linking Theory & Practice	0 - 0 - 0
Students as individuals	10 - 6 - 4	Curriculum	0 - 1 - 0	Reflections	70 - 55 - 62
Personnel Mentor teacher	20 - 11 - 24	Instruction	41 - 43 - 60		
Personnel Principal	0 - 0 - 1	School Policy	0 - 0 - 0		
Personnel Staff	1 - 1 - 3	Places & Contexts	1 - 3 - 3		
Personnel Other	0 - 0 - 3				
Personnel College faculty	5 - 6 - 7				
Total Entries:	48 - 31 - 50	Total Entries:	57 - 54 - 112	Total Entries:	82 - 55 - 71

Discussion of Content Analysis: Tanya - Practicum I, II, III Logbooks.

Under the heading People, Tanya's Logbook entries are relatively consistent across the three practicum experiences. The category Mentor Teacher features a significant number of entries. References to the mentor teacher as a role model are noticeable particularly in the first and third practicum placements. Students as Learners and Students as Individuals also receive a fair share of attention. Tanya's entries with respect to College Faculty deserve a special mention, since these reflect her desire to do well in front of such visitors and describe the nervous tension which results.

Under the heading Occurrences and Issues, references to Management and Discipline as well as to Instruction are indications of Tanya's awareness of her role in the teaching/learning process within the context of the classroom. Under the subheading Personal, the frequency of entries in the third practicum placement is worthy of notice. Tanya, who lives at home with her family and close to friends, lets it be known that a 3-week stay in a school quite some distance away from her home, is definitely not to her liking! Another factor during this practicum was the pre-occupation with job applications and interviews: a stressful time.

Note is also taken with respect to the entries which are not represented well, or not at all. References to the principal, the curriculum, and school policy are almost nonexistent. As are entries under the subheading Linking theory and practice.

The entries under Reflections are numerous throughout all three practicum placements. Tanya's desire to learn from her mistakes and to celebrate her successes reverberates throughout her writing under this heading.

Table 6

Reflections - Analyses & Critical Questions: Tanya - Practicum Logbooks I-III

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
-Initial reliance on outside appearance	1-008 <i>-[re: getting to know the students] Although tomorrow, when they're wearing different clothes, it will be interesting to see if I still know them.</i>	-Knowing the names facilitates interaction	-When does "knowing the name" shift to knowing the learner?
-The need to want to know where the student is at supports the outward appearance of EF	1-061 <i>-Every time I help a student, I understand where their minds are and how I best can explain things although I still have problems helping students to sound out and blend sounds.</i>	-Understanding the problem is the first step in solving it.	
	1-065 <i>-I think because words just make sense to me - - I don't "understand" why they can't see or hear it (or don't want to understand it).</i>		-If we cannot recapture the sense of what it is like NOT to know something, how can we get into the heads of our students?
-Looking without seeing	1-115 <i>-I think I would like to be more aware of what happens when I'm teaching.</i>	-Developing the "global" view and know what the students are doing at all times.	
	1-117 <i>-I was looking at the students, but I'm not sure I was seeing them---I was concentrating too hard on telling my story.</i>		
-The need to please an instructor	1-120 <i>-Tomorrow Mr.H.[College Faculty] will watch my math lesson. I'm terrified I think!!!</i>	-Physical symptoms of tension	-Do (student)teachers ever relax completely when evaluated?
	1-124 <i>-By the time I started math, my stomach had settled. I was so nervous when I woke up!</i>		
	1-126 <i>-I think my math lesson went well. Mr.H. had no real complaints.</i>	-Consistence, fairness and justice are difficult concepts for Gr. 1's	-How can a beginning teacher establish a sense of firmness without going overboard on the control issue?
-Conflicting emotions: not wanting to be mean/yet wanting to be fair. Note the aim: control!	1-165 <i>-I felt so mean when I did that [telling two students to sit down]! They were not listening to me-- I felt the class was getting out of control!</i>		
-Reflecting-on-action suggests a course for future action.	1-177 <i>-I think I need to remember to set definite boundaries in a gym class. It is a huge room, therefore hard to always remain in control.</i>	-A different place means a different context: different expectations and routines	
	1-187 <i>-Another thing I would have liked to change was to stop what I'm teaching if it's not working.</i>		

(Table 6 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-On the outside: the firm-sounding teacher. On the inside: the softhearted empathetic EF voice</p> <p>-Students transfer their learning to a social setting</p> <p>-First impressions count. . .</p> <p>-The difference four years of life and school experience makes! From a NO to a YES!</p> <p>-Paying attention to one's environment (ES)</p>	<p>1-192 -The parachute-- especially this one because it was too small-- was not something that could have been a complete lesson. I guess I can chalk up this "disaster" as a learning experience.</p> <p>1-364 -The boys accepted the "punishment" although A. [a student] protested that he was quiet, basically I said, too bad,-- so sad! Can't make exceptions; leaves the door open for more. The children were remarkably quiet!</p> <p>1-370 -They didn't hold it [punishment] against me either. After recess they all came up to me as usual to tell me things. That was a relief. I was afraid they would hate me for it!</p> <p>1-406 -Today was my last day. Some students came up to me and said "Au revoir". I was surprised! In French, no less! Gave them timbits as a goodbye gift. I learned a lot!! I think I will miss them. I promise to visit.</p> <p>2-027 -I think I am going to like Gr.5 and 6. The students are wonderful. However, they were quick to point out that I love to say the word FANTASTIC! I had not realized that I said it that much. I bet I will be more aware of it now.</p> <p>2-109 -Today, I ended the day, but once again made the mistake I had made in my first practicum. I said "May I pray with you. . ." As soon as I had said it, I knew that it was stupid. However I was surprised that the class said "Yes" or "O.K.".-- In Gr.1 it was "No"!</p> <p>2-125 -Also, I love the lay-out of her classroom walls. They are completely covered. I think that makes the classroom nicer to be in..</p>	<p>-Also the not-so-successful teaching/learning interactions are useful learning experiences</p> <p>-Saving face. . .Learning to separate the action from the one who acts.</p> <p>-An awareness of one's own quirks and funny habits may lead to changes in future actions.</p> <p>-Creating one's learning environment.</p>	<p>-Can one never make exceptions? How does a student teacher know how to make distinctions?</p>

(Table 6 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-Reflecting-on-action: Content reflection leads to process reflection . . .</p> <p>-When professional pride is wounded - personal relationships are the ones to fall back on. Recognize the importance of parents in the lives of our (young and inexperienced!) students. . .</p> <p>-Regain perspective and go on!</p> <p>-One learns by teaching!</p>	<p>2-136 <i>-One thing that I need to work on is my desire to answer a question that I ask if I don't get a response right away. I think I should either give more time, or rephrase the question. I'm not sure which. I know that I shouldn't answer it, though!</i></p> <p>2-168 <i>-Now I wonder if the students behave because Mrs.K. [mentor teacher] is in the room, or because I can control them???</i></p> <p>2-171 <i>-Today, Mr.V.[College Faculty] came to observe me. I was very nervous and to tell the truth, I am not very happy having to write down my day.</i></p> <p>2-226 <i>-I understand that observation means criticism, but when nothing positive is offered, it makes you feel awful! But nothing a 1/2 hour phone call home doesn't cure. Mom and Dad are put here for a reason, they always put bad things in perspective, but I'm going to stop now before I get upset again. Here's looking to next Thursday. . . I think I'm going to be sick with worry.</i></p> <p>2-233 <i>- Today was much better. I talked to Mrs.K.[mentor teacher] and she though that yesterday was better than I was thinking. She suggested that I was taking everything too personally. K.[Gr.1/2 teacher] was a great comfort too. She said I will grow to appreciate criticism. I can't imagine that! It's not that I don't like criticism, but giving something nice first sometimes helps. Even if it's "You speak clearly" or anything. . . Anyways, I'm just going to forget yesterday ever happened.</i></p> <p>2-366 <i>-Now even I know what a predicate is. You learn something all the time.</i></p>	<p>-Knowing something is not right - without quite knowing why. Tacit understanding!</p> <p>-For most, it's easier to reflect on good things than on bad ones</p> <p>-Collegial support is very important for the beginning teacher. One must learn to seek it and accept it.</p> <p>-This learning experience could be of benefit to the student teacher's interaction with the class. Practise what you preach!</p>	<p>-When does a student teacher know <u>she</u> is effective-independent from the mentor?</p> <p>-How do we learn to change a negative critique into a positive learning experience?</p> <p>-In helping to maintain a sense of balance, is it helpful to assign a beginning teacher to the mentoring care of an experienced colleague?</p> <p>-Whose role is it to determine what's worth knowing?</p>

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-A relevant and realistic application of assessment theory.</p> <p>-The sensitivity of EFs (Tanya's "public" face). What happened to the "judgmental" nature of the auxiliary IT function?</p> <p>-"If I don't get it - how can I expect Gr.5s to know it!"</p> <p>-An interesting comment from someone with a high score on reflective observation (Kolb)</p>	<p>2-379 <i>-I had to mark the presentations out of 10. Mrs.K.[mentor teacher] also marked them. After class, we discussed the presentations and our marks. She told me why she had assigned a certain mark. I found this extremely helpful.</i></p> <p>2-382 <i>- I didn't like marking subjective things like this. I want to be too generous. I don't like being critical, so I don't know what to look for. This most likely will come with practice.</i></p> <p>2-459 <i>-I find that I'm learning lots of stuff that I didn't really know.</i></p> <p>2-467 <i>-I really enjoyed this class, and I think I will miss them. I am surprised how much I liked Gr.5/6, although maybe it was this class.</i></p> <p>2-469 <i>-I liked making them think. . .I just felt I couldn't do that with grade 1's.</i></p> <p>3-098 <i>-Spelling was a chore! We did an exercise from the textbook. I do not like the textbook. Half the time I could not even find the answers, unless I looked them up-- and I have a university degree!!</i></p> <p>3-114 <i>-Not much to say about today. Nor am I really into this Logbook. . .</i></p> <p>3-117 <i>-I have decided that I do not like reflecting all the time.</i></p> <p>3-119 <i>-I do get to go home tomorrow. Yea!!</i></p> <p>3-120 <i>-Sorry, I'm tired and I want to go to sleep! Mr.H.[College Faculty] is coming tomorrow and I want to be well rested. . . you know: bright eyes and bushy tail!!</i></p> <p>3-146 <i>-Science was my final lesson. Although I did run out of time-- it took longer than I had expected.</i></p>	<p>-Importance of linking learning outcomes and assessment</p> <p>-Keeping up with "content" requires effort</p> <p>-The textbook dictates lesson content - even when it appears to be of little use. . .</p> <p>-Time management is a critical factor in investigative settings</p>	<p>-Why this notion that you can't make Gr.1s think?</p> <p>-Again: Who is responsible for curriculum selection??</p> <p>-Does evaluation imply a special performance?</p>

(Table 6 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-Does content reflection indeed lead to effective change? No self-directed learning. -Content and process reflection. Problem to be solved by concrete experience(ES & Kolb)</p> <p>-Teaching is not parroting! Note the weight added to the opinion of the students. . .</p>	<p>3-151 <i>-One thing that did not go as I had hoped-- it said in the book that if you add salt to ice (it lowers the freezing point), the ice melts quickly. I knew this would happen, but then they asked why?!- a chemical reaction, right?! But other than that I did not know. I felt kind of stupid.</i></p> <p>3-158 <i>-Next science class I will make sure I consider all possible questions I might have to face. I do think the text was insufficient in its information.</i></p> <p>3-189 <i>-I'm not sure that my story was as interesting as it could have been. I gave the facts, but something was missing--- I still don't know what- I guess I have to try and do something different tomorrow-- add more "colour".</i></p> <p>3-206 <i>-The things they [students] want to know!</i></p> <p>3-211 <i>-Today I also taught phys.ed.-- not too successfully either.</i></p> <p>3-212 <i>-I guess I was not as prepared as I had thought.</i></p> <p>3-213 <i>-I tried to go by what Mr.V.[mentor teacher] does, but it's not me.</i></p> <p>3-215 <i>-I don't like screaming-- and my voice doesn't carry enough.</i></p> <p>3-217 <i>-Furthermore, I tried to copy Mr.V's warm-up, but when I forgot things, the kids would pipe up and tell me. It made me look unprepared. . .</i></p> <p>3-225 <i>-The whole class was uncomfortable. I didn't feel like I was in control.</i></p> <p>3-341 <i>-I found it difficult reviewing the two lessons Mr.V. had taught before I was in the classroom. It is so much easier reviewing material that you have taught-- you know what your objectives were, and what you emphasized.</i></p>	<p>-Be sure to know your "stuff", so at least you can anticipate some of the questions</p> <p>-Learning as an external orientation (Korthagen, 1988)</p> <p>-Relevant/irrelevant distinction</p> <p>-Importance of developing one's own style -Physical limitations require workable solutions [a whistle!]</p> <p>-Again the issue of control.</p> <p>-Experiencing the connection between instruction and assessment</p>	<p>-Teacher as "fountain of knowledge" or as a lifelong learner?</p> <p>-Is anticipation a teachable concept?!</p> <p>-What does it mean, "To be in control"? [c.f., Freire (1981)!]</p>

(Table 6 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>-The Golden Rule in action: Do unto others. . .</p> <p>-Instruction or entertainment?</p> <p>-The ES concern: Not having any imagination! Even a bulletin board becomes a test of competence.</p> <p>-Uncomfortable with the "mean guy's" role. The EF need for harmony.</p> <p>-Illustrates the closeness of this College group - socially as well as in the cohort group setting.</p>	<p>3-384 <i>-I also marked these tests tonight. (I always hated when teachers took forever to return tests!)</i></p> <p>3-423 <i>-Towards the end [of a review] I was losing their interest. Should I have made it a game? (I did it with science)</i></p> <p>3-426 <i>-I suppose. . . But I think it's sad that everything needs to be a game for them to be interested.</i></p> <p>3-434 <i>-Communication Skills was on verbs. Mr.H.[College Faculty] and I discussed the value of today's lesson. I think it is safe to say we saw very little value in it.</i></p> <p>3-460 <i>-Tonight I prepared my bulletin board--tomorrow I will put it up. . . hopefully it looks o.k. I'm not creative, so it probably will be a little boring. But it's my first. . . maybe I worry over nothing.</i></p> <p>3-476 <i>-Today we had a Bible test. So many students would ask for answers. I was surprised, but I also felt mean for saying "I can't answer that".</i></p> <p>3-499 <i>-I taught creative writing (actually, just giving a topic "Prince Lazy Bones" and supervising). It amazes me that some students are quite creative, while others find it such a chore.</i></p> <p>3-503 <i>-I empathize, because I always hated open-ended creative writing assignments.</i></p> <p>3-520 <i>-I'll miss the class, but I'm happy that Practicum is over-- family and friends are a primary concern this weekend.</i></p> <p>3-523 <i>-I can hardly wait to get back to the College to see everyone again! Three weeks is a long time!</i></p>	<p>-Methodology is not a gimmick but a support for genuine learning</p> <p>-Also illustrates the value of teaching test-taking skills</p> <p>-Note variety in learning outcomes</p> <p>-Do we teach the way we learn best?</p>	<p>-Has learning become entertainment? Do today's learners expect to be entertained?</p> <p>-Can "creative" writing be taught by a "noncreative" ES teacher?</p> <p>-What is the function of one's family and social context in the learning process?</p> <p>-If a three-week practicum is considered to be long, what will the first year of teaching be like?</p>

Summary Statement: Tanya - Practicum I, II, III Logbooks

To the reader who knows Tanya a little, her practicum logbooks could be described as "hearing Tanya's voice on paper". The experiences gleaned from the various practicum placements come through loudly and clearly, and span the spectrum from personal needs and issues to the desire to become a professional engaged in reflective practice. Throughout them all is the refrain "I want to do the right things!"

When Tanya described her fears and trepidations before embarking on her very first practicum, she wrote, "I am absolutely terrified that I will fall flat on my face and be a horrible teacher! I have been taught by both good and bad teachers: I know there is a difference. But how do you avoid being a bad teacher?" To sum up her feelings, she concludes her description by providing a summary statement, "Fear the worst, hope for the best and all will go well!"

At the conclusion of her third practicum, Tanya suggested that practice teaching is "a wonderful learning experience - you really get to jump right in and see firsthand what works and what doesn't."

When reviewing Tanya's personality type [P.E.T.] and learning style [Kolb] in the light of her logbooks, I conclude that her profile is a little complicated. The combination of introverted thinking and extraverted feeling suggests that she is different when working with others than when working alone. The logbooks certainly show the "public" face, and reflect primarily Tanya's EF side.

Tanya made it quite clear that writing logbooks is not something she enjoys. She appreciates the exercise as a learning experience as she writes, "Writing a logbook is like eating your yucky vegetables: You know you should, and in the end you are

better off for having done it, but it's not the most pleasant experience. . ."

When asked specifically about the practicum experience as a way of linking theory and practice, her comment was,

Although I did not write about linking theory and practice, I am aware of it to some degree. I find it comes out in conversations with your mentor teacher at the end of a day when you discuss what worked, what didn't and why not.

Recognizing that her teacher preparation is far from complete, Tanya continues,

However, I am not as aware of theory as I would like to be. I am hoping that the more practice I get as a teacher, the theory will become "my own." I think that after one or two years of teaching I would love to take the curriculum course again. I would probably get more out of it.

She reiterates her thoughts on her own learning as "wanting to please the teachers, because that is the easiest way to 'get the good mark'." However, she is also determined to downplay that quality in students in her own future classes.

True to form, Tanya concludes her comments to me by writing "I'm not sure what else you want to know. . . It's not that I don't want to write more, I just don't know what you're looking for."

Mike

Introducing Mike

Mike entered Covenant Teachers' College with the intent of becoming a high school teacher. In a pre-enrolment questionnaire, Mike makes it clear that he wishes to "help in ensuring the proper education of our boys and girls so that they can be prepared for what lies ahead of them after school." Among a teacher's qualities, he considers

faith in the Lord, for without it a sound teaching basis is lost; healthy leadership skills, in order to be able to guide a group. . .; high self-confidence, to be confident in what you are teaching as well as how you are teaching it; good communication skills. . .

among the top four.

As the second oldest in a family of six children, Mike has interacted with his siblings, helping them with homework. He also coached a girls' softball team for several years. Married, and looking forward to the birth of a second child, Mike describes how parenting has allowed him "the pleasure of raising my one year old son. This joy has taught me, if anything, the art of patience. It has also made me an understanding and level-headed person."

It is quite likely that Mike's year at Covenant Canadian Reformed Teachers' College will prove to be of immediate benefit to him as he has accepted an out-of-province teaching position. Mike will be teaching Grade 7 as well as some additional science courses on rotary.

Learner Self-Description

In describing himself as a learner, Mike wrote "I have always been a go-with-the-flow type of learner. I was a learner who was always fairly quiet, and would only speak when spoken to. I was the type of learner who would 'get' things right away. I think this is why I was such a content learner." He continued and explained that he does not remember a great deal about his elementary school days, and suggests that "I believe that the method of teaching was definitely geared towards my type of learning. I think this is why I don't really remember any classroom learning incidents that have affected me."

In writing about his experiences at the secondary school, Mike is very clear that his social status in the class was very important to him. In that respect, Grade 9 was a "terrible year- socially." Uncomfortable in voicing his opinion or being centred out, Mike felt most comfortable in science classes where, "I could again go with the flow, and become one of the mass of students, not being called upon frequently." In summing up his secondary school learning experiences, Mike writes about his teachers,

I don't think they affected my learning for the better or for the worse. I was too concerned with my social status in school and in the class to allow any teaching strategies or teachers affect my learning--as far as I can remember. As my status became better, my confidence in the classroom increased. However, I still was very conscious about what people thought. This definitely affected my learning, as this was always my first priority.

Alluding to his experiences as an undergraduate student, Mike suggests that "It took me four years to realize that independent learning, self-motivation, and learning strategies were necessary for success." He successfully completed his undergraduate degree in Science (Major: Biology).

At the end of his first semester at Covenant Canadian Reformed Teachers' College, Mike concluded his learner self-description by noting that "Learning this past term was pretty much the opposite of what I was used to. Reflective learning is something fairly foreign to me."

Descriptive Instruments

The instruments used to provide additional insight into Mike as a person resulted in the following observations:

- a. The P.E.T. Profile (Professional Effectiveness Technologies, 1994e) indicates that Mike displays extraverted sensing as his dominant function, and extraverted feeling as his auxiliary function.
- b. In terms of self-directness, using the Guglielmino's SDLR Inventory (Guglielmino, 1977), Mike scores in the average range [226].
- c. The Kolb Learning Style Inventory (Kolb, 1984) indicates high scores on active experimentation and abstract conceptualization. Although there is not much differentiation in the profile, the style which seems to describe Mike's learning best seems to be that of convergent learning. Accommodative learning is a close second.

Instructor's Description

Having experienced Mike as a student in several of my classes, I would concur with the description of a "go-with-the-flow" kind of guy. Quite laid-back and level-headed, Mike initially participated in our discussions by invitation only. Throughout the course of the year this has changed. As Mike became more at ease with his fellow students, the level of his spontaneous participation increased steadily.

In my role as faculty advisor, I have observed Mike in two practicum settings: his first practicum (Gr.7) and his third practicum (Gr.8). Throughout the course of his three practicum experiences, Mike was always very conscious of creating something positive out of a potentially less-than-positive experience.

My overall sense of Mike as a person and learner is that he is a pleasant, thoughtful, caring, cooperative, mature and level-headed individual, who is determined to become a good teacher.

Practicum Logbooks

Mike's practicum logbooks are hand-written. The cursive script is neat in appearance, consistent and quite legible. Daily entries are approximately one page per day on average. An excerpt of the logbook, as well as an excerpt of the Reflections found in the content analysis may be found in Appendix E. Across the three practicum placements, the number of lines is consistent at about 28 lines per day.

To the reader, the logbooks give an impression of selective, concise and to-the-point reporting. A summary and comparison of the number of entries under the headings used in the content analysis may be found in Table 7.

Table 7

Number of Entries under Content Analysis Headings - A Comparison: Mike - Practicum 1, II, III Logbooks

People:	Practicum #: I - II - III	Occurrences & Issues:	Practicum #: I - II - III	Comments & Reflections:	Practicum #: I - II - III
Students as a class	1 - 6 - 6	Personal (non- school)	1 - 0 - 0	Observations	0 - 3 - 18
Students as learners	3 - 4 - 19	Management & Discipline	11 - 30 - 35	Linking Theory & Practice	0 - 0 - 0
Students as individuals	16 - 14 - 16	Curriculum	1 - 0 - 9	Reflections	37 - 41 -137
Personnel Mentor teacher	16 - 9 - 38	Instruction	23 - 60 - 42		
Personnel Principal	0 - 0 - 1	School Policy	0 - 5 - 0		
Personnel Staff	0 - 1 - 0	Places & Contexts	7 - 2 - 6		
Personnel Other	0 - 1 - 2				
Personnel College faculty	3 - 3 - 6				
Total Entries:	39 - 38 - 88	Total Entries:	43 - 97 - 92	Total Entries:	37 - 44 -155

Discussion of Content Analysis: Mike - Practicum I, II, III Logbooks

A comparison of the entries found across the three practicum logbooks indicates that Mike's references to People and especially to Students as a class, as learners and as individuals are quite consistent. Entries which name the mentor teacher are notably more frequent in the third practicum. In addition to mentioning the mentor teacher as a role model, the references to the mentor teacher found in the third practicum logbook are somewhat more critical in nature. A recurring theme is that of the authority in the classroom, especially the attempt of a student teacher to establish a sense of authority within the context of classroom management and discipline as well as instruction. At times, Mike is found questioning the wisdom of the mentor teacher's interventions. Given this setting, it is not surprising, therefore, to note the high number of entries under Management & Discipline.

Under the subheading Instruction, the second practicum setting reflects the highest number of entries. Again, this ought not to come as a surprise, given that this was a high school placement in which Mike was responsible for the maths and sciences, areas of personal academic strength. Explicit references to methodology characterize the entries.

Mike's Reflections throughout his third practicum experience indicate excellent growth and development as a student teacher.

In the logbooks, references to the principal, the staff, and the linking of theory and practice, are noticeably absent.

Table 8

Reflections - Analyses & Critical Questions: Mike Practicum Logbooks I-III

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>- One's actions are not always grounded in explicit theory. First we do, and then we wonder why. .</p> <p>- Whether it works or not- at least it makes me feel better.</p> <p>- Reflection-on-action begins by asking a number of questions.</p> <p>- Developing one's own style often begins by recognizing in others what might not work for you.</p> <p>- Minor detail or major teaching point? How do we make the distinction?</p>	<p>1-007 <i>-I walked through the class while reading. This was maybe to get everyone to listen? Or at least to get their attention momentarily.</i></p> <p>1-010 <i>-I don't know if this worked.</i></p> <p>1-011 <i>Also, it made me a little more comfortable, rather than standing in one spot all the time</i></p> <p>1-013 <i>-It seems that the same kids always listen more intensively or attentively.</i></p> <p>1-017 <i>-The vocabulary test didn't quite go as well. There were a lot of puzzled faces. Was it the way I was giving the test, or did they not know their stuff? Maybe my examples confused them? I will have to talk to Mr.S. [mentor teacher] about this.</i></p> <p>1-022 <i>-It was a relief to be done for the day.</i></p> <p>1-024 <i>-Mr.S. gets the class to respond well to his lessons. He is very dramatic. I'm not sure I can be <u>that</u> dramatic.</i></p> <p>1-042 <i>-Today was my first lesson. It was only a spelling lesson. Mrs.V.[CCRTC faculty] came today. Although I have not had the opportunity to see a spelling lesson, this was the only opportunity she would have to observe me. It's only spelling! It seemed to go well for a spelling lesson.</i></p> <p>1-051 <i>-I taught pre-fixes [sic] to the class. I failed to mention that pre-fixes [sic] change the meaning of words with the same root. I thought that was obvious, but I guess you can't take anything as obvious.</i></p>	<p>- Finding one's niche and developing a stance.</p> <p>- Using the mentor teacher as a sounding board for one's own "theories".</p> <p>-Teaching as a taxing task</p> <p>- Careful analysis of the learning process as part of one's planning helps in not taking anything for granted.</p>	<p>- Do beginning student teachers know this for sure?</p> <p>- How can we build strength and develop stamina in our student teachers?</p> <p>- Do we communicate our hierarchy of subject to our students in a negative way? Do we suggest that spelling is not important?</p> <p>- How can student teachers "walk" through a lesson without little previous exposure or experience?</p>

(Table 8 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>- Is ignorance bliss? Pragmatism in action. . .</p> <p>- To an extraverted sensing type, does this "make sense"?</p> <p>- Practical application of ideas means active student participation and interaction. A mode which suits the convergent learning style and is music to the ears of an extraverted sensing type.</p> <p>- Practical realization of the importance of format.</p> <p>- Classroom teachers as general experts?</p>	<p>1-057 <i>-Other things also needed improvement. I expected this. I will try to take Mrs.V.[College Faculty]'s advice and go through my learning in terms of the students' learning.</i></p> <p>1-077 <i>-Mr.S.[Mentor Teacher] ignores the students when he's trying to get something done. This is what I have to work on. I think I need to answer every question.</i></p> <p>1-080 <i>-Mr.S disciplined two students while I was teaching. This made me feel like I wasn't aware of what was happening in the class. Maybe I'm a little more tolerant than he. Should I be?</i></p> <p>1-125 <i>-The science experiment involved a lot of class participation and discussion. I felt that I was still able to maintain control of the class and run the experiment smoothly, while keeping most students interested. I'm fairly comfortable teaching this, because I feel I can really get my point across.</i></p> <p>1-131 <i>-I think I can get it across in other subjects too, but I feel most comfortable in science.</i></p> <p>1-160 <i>-Some of the homework which the students did for the lessons which I taught was marked. In this way I could get some feedback on whether or not I actually taught them anything.</i></p> <p>1-163 <i>-The results were fairly good. While marking, I realized that it was to their benefit (for math) for them to write the question in their notebook.</i></p> <p>1-166 <i>-Another lesson learned.</i></p> <p>1-211 <i>-Stumbling over English words is easy enough to do while you are in front of the class. You can imagine how easy it was to stumble over French words.</i></p>	<p>- Mentor teacher as a positive or negative role model?</p> <p>- Finding one's own framework and tolerance level.</p> <p>- Personal knowledge level is an important factor in building teacher confidence.</p>	<p>- Do student teachers really "hear" us in a practicum setting?</p> <p>- The practicum classroom: whose territory is it?</p> <p>- Does marking homework assignments really assess one's teaching success?</p>

(Table 8 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Practice teaching= preparing oneself for a performance. - When majors become minors. - Accidental or intentional teaching? - A minor detail. . . - Reflection-in-action may lead to repeating the action! - Going with the flow means making something positive out of a somewhat negative situation. - Making up for lost time. 	<p>1-214 <i>-I hadn't anticipated this. Concentrating on the correct pronunciation was strenuous.</i></p> <p>2-001 <i>-This was the first time I had the opportunity to observe the Gr.10 class. First impression- they were a lot bigger than the Gr.9 class.</i></p> <p>2-033 <i>-I was so busy going over things in my mind and on paper, that I hadn't realized how fast time went.</i></p> <p>2-035 <i>-Anyways, I made it through alive. It went fairly smoothly.</i></p> <p>2-037 <i>-One of the things I wanted to teach, however, I had forgotten- until near the end of my lesson. This was how to check solving equations.</i></p> <p>2-057 <i>-I wasn't sure how to introduce the subject matter, so after introducing the topic, I sort of went right into examples.</i></p> <p>2-061 <i>-[a confusing example] Just a little, though! I started explaining it backwards.</i></p> <p>2-062 <i>-Then I caught myself, and told the class we were going to start from the beginning again.</i></p> <p>2-064 <i>-This actually made me feel more relaxed for some reason.</i></p> <p>2-066 <i>-I can see however, how this might have thrown some of them off.</i></p> <p>2-068 <i>-Messing up on the first example when trying to introduce something new isn't always a good thing.</i></p> <p>2-070 <i>-I therefore went through more examples than I had originally planned to make sure they were on the right track.</i></p> <p>2-097 <i>-So many things to monitor, yet only one me.</i></p>	<ul style="list-style-type: none"> - Limited focus of our energy. - Practice teaching as an act of sheer survival. - Students learn in spite of their teachers. - Recognizing the importance of methodology. - Teaching as a taxing task. 	<ul style="list-style-type: none"> - Does sheer size intimidate even the male teachers? - Are teachers actors on a stage? - What happens when we lose the script? - Does the regular presence of student teachers have a negative effect on learning?

(Table 8 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Reflection may also mean that although you've noted something, this in itself does not lead to action. - The need to establish a caring climate for learning. - Lesson pacing as an important element in class management. - Having one's own class will solve it all. . . - The fear of the mentor teacher expecting too much. 	<p>2-101 <i>-I had noticed her [a student] to be sad, but I didn't have time consider why.</i></p> <p>2-102 <i>-Does that ever sound insensitive!</i></p> <p>2-115 <i>-While explaining, I could sense that people were confused.</i></p> <p>2-116 <i>-I try to make the class feel as comfortable as possible with me, so that they can ask if problems arise.</i></p> <p>2-118 <i>-I try to make them feel like it is o.k. to ask questions.</i></p> <p>2-212 <i>-From this point [after students had asked many relevant as well as irrelevant questions] on it was difficult to keep their attention.</i></p> <p>2-226 <i>-Too slow I think, and Miss V.[Mentor Teacher] confirmed this.</i></p> <p>2-227 <i>-I'm too worried about <u>everybody</u> "getting it", and so I think I slow myself down.</i></p> <p>2-229 <i>-I have to learn to keep the pace going, and give them - the students- a chance to get it!</i></p> <p>2-231 <i>-I think once I start teaching my own class and I have a certain amount of work to get through in a year, I'll realize that, or become more aware of the pace I should be going.</i></p> <p>3-002 <i>-Mr.D[Mentor Teacher]'s approach to teaching is that he gets the students involved. However, and I think I maybe the same in this respect, I think he lacks a "mean streak" as Mr.H.[College Faculty] puts it.</i></p> <p>3-006 <i>-[re: qualities of the Mentor Teacher] However, and again I may also have this quality, he is a very patient man and teacher. He has almost been teaching for 30 years. (Wow!)</i></p>	<ul style="list-style-type: none"> - The teacher as a caring individual - Developing a safe place for learning. - Mentor teacher as a sounding board. 	<ul style="list-style-type: none"> -How do student teachers know when to empathize or intervene? - How does the student teacher distinguish between genuine questions and "let's kill some time" type of questions? - How does the student teacher know when to move on? - Potential for conflict? - What is the balance in being a nice guy with a mean streak? - Can extensive experience on the part of a mentor teacher be a drawback?

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Identifying a specific target for growth is evidence of self-directed learning. - Personal knowledge and comfort level are important. - Anticipating changes in student behaviour. - The importance of creating a bond with the student is relevant at all grade levels. - The need for harmony and cooperation in the learning environment. - A man with a mission. . . - Developing and implementing a plan of action. 	<p>3-009 <i>-I am afraid he [a very experienced Mentor Teacher] may not remember what it is like to be a student teacher.</i></p> <p>3-025 <i>-One thing I was conscious of was my time frame. I'm trying not to lose track of this, as this was one of my weaknesses last practicum.</i></p> <p>3-035 <i>-The words don't seem to formulate quick enough for me to use this approach. Although they were very quiet the students- some of them did lose interest. I have another idea for next time.</i></p> <p>3-040 <i>-Math was next and I felt more comfortable here. The students felt more comfortable also. This class really likes to just talk whenever they want.</i></p> <p>3-043 <i>-It was minimal today, but I know in future classes it will probably be worse. I think I'm ready!!?</i></p> <p>3-047 <i>-I think I'm starting to develop a little bit of a rapport with the students as some of them are talking to me a little more freely.</i></p> <p>3-050 <i>-A few of them even said "bye" to me today without me saying "bye" first!</i></p> <p>3-052 <i>-One in particular is one of the more rebellious students. I hope the students will become more comfortable with me and I with them, so that we can have a good three weeks together.</i></p> <p>3-081 <i>-Today was the day I decided I was going to prove to myself that I could control the class.</i></p> <p>3-083 <i>-After numerous warnings, I wrote three names on the board for talking out of turn. I decided that this was a good opportunity to establish authority.</i></p>	<ul style="list-style-type: none"> - Experimenting with various methodologies in an effort to find one's own style. - Students acknowledge you as a person- a good feeling. - Establishing a sense of "authority" to be met with a degree of respect on the part of the students. 	<ul style="list-style-type: none"> - Can we ever really look back? - To what extent can a student teacher put a personal stamp on the class?

(Table 8 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Lack of anticipation leads to mentor teacher's intervention. - A splendid discovery! - Students acknowledge the student teacher as a person. - Nonconfrontational, yet disturbed by the incident. - The importance of feeling good about one's work. - Not surprising to hear this from an Extraverted Sensing person. - Reflection-on-action in the form of content and process reflection. - Ability to self-evaluate. 	<p>3-087 <i>-I hadn't decided what I was going to do with them yet, however, Mr.D. gave them punishment before I could.</i></p> <p>3-090 <i>-The class settled right down. Is it ever easier to get your point across when it is quiet in the room!</i></p> <p>3-092 <i>-I found that after the lesson, during break, more and more students were beginning to approach me and talk to me.</i></p> <p>3-095 <i>-This was a good feeling.</i></p> <p>3-154 <i>-I am getting a little discouraged however, when I see Mr.D. taking students aside during Language arts to clarify some of the math.</i></p> <p>3-156 <i>-Instead of coming to me for help, they go to him. I'm not sure how to take this.</i></p> <p>3-238 <i>-I can feel myself getting back into my <u>old</u> self again- the way I felt in F.[previous Practicum] school.</i></p> <p>3-239 <i>-There I felt confident and I also felt a was a more effective teacher.</i></p> <p>3-241 <i>-When I have my lessons packed with demonstrations and activities, I feel I relay my lesson much more effectively.</i></p> <p>3-286 <i>-However, when I do think about it, I realize what I may be doing wrong, and how I can improve.</i></p> <p>3-289 <i>-I feel the hardest thing to do, and especially in this class, is to be consciously aware of what the students are doing.</i></p> <p>3-319 <i>-Two weeks finished, and I definitely feel there has been progression.</i></p>	<ul style="list-style-type: none"> - A positive experience of silence. - Mentor teacher intervention is experienced as a negative thing. - Establishing one's authority as a teacher in the classroom. - Desire to oversee and guide student activities. - Teaching as a a taxing task. 	<ul style="list-style-type: none"> - Is the student teacher too slow, or is the mentor teacher too hasty? -To what extent do teachers rely on their students to "make them feel good"? - To what degree does the level of confidence relate to teacher effectiveness? Is it real or perceived?

(Table 8 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<p>- The learning process also leads to a greater sense of independence.</p> <p>- Is there really a correlation between one's teaching performance and the students' test performance?</p> <p>- A distinct sense of "Phew, I did all right!"</p> <p>- Content reflection. Where is the next step?</p> <p>- Teaching and learning as an interactive process.</p>	<p>3-321 <i>-My final week! Not that it's been that bad, but I will be happy when it's over. This is not to say that I don't enjoy teaching, or even teaching this class, but I can say that I will enjoy having my <u>own</u> class more.</i></p> <p>3-325 <i>-This goes back to the business of rules and routines, my teaching style etc.</i></p> <p>3-385 <i>-Today there was a math test on basically the unit which I taught. It will be interesting to see how they do. This will tell me what areas got through to them and what areas didn't.</i></p> <p>3-406 <i>-I think I would deal with S. in everyday classroom life differently. He seems to get in a lot of trouble which could be avoided if he was in a different spot.</i></p> <p>3-423 <i>There was a good distribution of the marks, which tells me that the material which I taught, (since I taught most of the unit) was learned by the students.</i></p> <p>3-427 <i>-This was a good feeling. There were certain areas which students found difficult, and it showed on the test</i></p> <p>3-455 <i>-I feel these [science lessons] went rather well, and the students became informed. In both they were rather cooperative. This may be because of the pace of my lesson as I tried to keep it going.</i></p> <p>3-459 <i>-I felt really well in Gr.8 science, as it seemed everyone was really with me.</i></p> <p>3-460 <i>-This is a good feeling. I'm glad I am leaving on a positive note.</i></p>	<p>- Ready to spread one's wings.</p> <p>- Beginning to offer alternatives to the mentor teacher's way of dealing with individuals.</p> <p>- Setting criteria and offering reasons for success.</p> <p>- All is well that ends well!</p>	<p>- At what point becomes practice teaching a stifling experience?</p> <p>- Do we as teachers take the credit? What about poor test results?</p>

Summary Statement: Mike - Practicum I, II, III Logbooks

Throughout the course of the three practicum placements, Mike has demonstrated considerable growth and development as a teacher as well as a learner and a person.

Mike did not really identify any fears or trepidations prior to embarking on his first practicum. In the context of a general discussion, Mike suggested that he would find out what it was like to be a teacher, and that he would undoubtedly need to learn a great deal.

Upon completing the third practicum, Mike was a little more explicit when he described his practice teaching experience as

an introduction to the art of teaching as a professional. Experiencing different techniques and trying to develop what works well for you. Filling up your bag [of tricks]. Getting some sort of a perspective of what it will be like.

With respect to his role as a student teacher, Mike felt that "it was artificial at times. Trying to develop yourself as a teacher in a three-week period. As a student teacher, you need to use the time to collect ideas for the most part."

Mike's opinion about the value of keeping a logbook also left little doubt in the mind of the reader, "It is cumbersome at times. Not being a journal writer at all, it seemed to be forced. However, I discovered that during and after I wrote, it seemed to be very therapeutic."

As an extraverted sensing person, it does not come as a surprise that Mike enjoyed the contact with fellow students and teachers. In addition to the need to create a cooperative learning environment, Mike also explained that his manner of

linking theory and practice was most effectively done in conversations with others.

Talking with staff members helped him get the ball rolling, and offered opportunities to link the theory to the practice and vice versa.

The Kolb learning style inventory described Mike as a divergent learner, closely followed by the description as an accommodator. Having chosen science as an area of study, it seems logical that Mike's preferred teaching style is characterized by an active interaction with the students. From my own observations, seeing Mike in action, as well as from the descriptions found in the logbook entries, Mike was happiest in the setting which found him surrounded by students "doing science."

In the setting of the College, Mike's desire to bring abstract concepts back to concrete realities wherever possible was noticeable.

The sense of "I'm ready for my own class" is prevalent throughout the final entries of Mike's logbook. The anticipation of establishing a caring and safe learning environment for his learners has characterized Mike's stay at Covenant Canadian Reformed Teachers' College.

Julia

Introducing Julia

For Julia, the choice to come to Covenant Canadian Reformed Teachers' College emerged from several fundamental beliefs she holds about the purpose of teaching and learning in a Christian setting. In responding to the questions on her pre-enrolment questionnaire, Julia writes,

I believe that a Christian education with a Reformed perspective is important for children as it gives them a strong basis and knowledge of God's Word and His Will for them, in a caring environment in which to learn and the opportunity to interact with peers of the same faith and a Christian outlook on the world around them.

She continues by describing her views on the purpose of education and her role in this as she points out,

It is also important to use the gifts God has given me in order to teach the youth of His church. Thankfully, the Covenant Canadian Reformed Teachers' College has been established to equip prospective teachers with a solid Christian foundation to stand on and from which to view the subjects to be taught and how to teach them.

In an effort to make the basic belief statements apply to her view of what qualities a good teacher ought to display, Julia points out that "a teacher should be an active Christian first of all. A successful teacher is also one who is creative, patient, encouraging and energetic," able and willing to "provide an interesting and comfortable atmosphere in which to learn."

Julia writes that she likes children, but aside from babysitting, has not had much formal interaction with them. With an academic background in English and history (art and culture), Julia suggests that her weakest area is math. In her leisure time, she enjoys going for walks, conversations with friends, travelling, reading, listening to music, and cooking.

Julia hopes to put her learning into practice next year as she will work as an assistant teacher in the junior division of the elementary school.

Learner Self-Description

When invited to describe her own learning, Julia took the option to submit her views of her own learning experience at the elementary, secondary and postsecondary levels in the form of an audiotape.

When speaking about her own learning in the elementary school, Julia described herself as quite a good student who enjoyed school. She said,

I remember quite a bit about elementary school and that includes all my teachers. Of course some stand out a lot more than others. --I remember things like--when I finally understood long-division; just fights at recess--all kinds of things.

Her high school experience was quite different. Coming from a relatively small elementary school, the change to a large high school was a dramatic one for Julia and affected her learning quite profoundly. "That was a big adjustment for me, because I only knew about two other people in the whole school. I hated Grade nine and ten. I was really insecure and it was a very difficult time. My marks dropped

dramatically." The size of the school made her disappear into the crowd, she felt that she "was just a nobody all over again. So, that was difficult and especially in math and science my marks went down a lot." Over time, however, Julia became involved in various extracurricular activities and that changed her outlook somewhat. By the time she was in the senior grades, matters changed for the better. "I think I relaxed more, was more comfortable with myself and my friends, and so socially it was better, and since that was better, I think that's why my marks went up."

Postsecondary education was a totally different experience. She states, "I loved university. I liked being on my own, and being in contact with so many different kinds of people and hearing so many viewpoints." Alluding to the instructional settings which she feels work best for her, Julia states,

I guess I learn best from lectures- well, depending on who is lecturing!

A couple of professors that particularly stand out: I had one professor that I had for every year, except one, and she taught a lot of humanities. I had her several times for several different courses. She was a very. . .she was excellent! She won a lot of awards, and I have seen her in newspapers and so on. She was really great, because she was so enthusiastic about the subject matter."

In addition to her appreciation for professional and academic excellence in her instructors, Julia also stresses the importance of personal contact between student and instructor. For her, such contact made her want to do well. She says,

She [the award-winning professor] was just such a vibrant speaker that I would do anything but miss her classes. Even just speaking to her in her

office. . . she always. . . you know, for such an intelligent and accomplished woman, she always made me feel like I had something important to say.

Which was, in turn, encouraging once again. Um-, even if you saw her outside of class, at the cafeteria or whatever, she would sit down and talk to you. . . and about. . . have coffee and just talk to you, like you were an equal. She did not talk down to you. . . It was good, and it made you want to work harder. . . want to please her and I guess in that way that's very beneficial for yourself too, because then you learn a lot more. She is one professor that really stands out in my mind.

As far as Julia's perception of her own preferred learning mode is concerned, she explains that she was never one to participate much in group discussions.

As far as small group discussions went: I did learn from them, although I don't think I really participated in them. To the extent that one prof asked me "Why?" and--I don't know--I guess the correlation between maybe my marks and my lack of participation wasn't really there. I mean I was, getting fairly good marks, but I wasn't really participating--but I don't know, I guess being in a university situation--everyone is coming from a different background and, well, just the fact that you don't know these people really did kind of intimidate me, and so I did avoid participating in a lot of discussions.

Coming to Covenant Canadian Reformed Teachers' College meant an adjustment for Julia. She comments on the small class size, and finds it helpful for her own learning,

It was different. It was, it was an adjustment, but it was a very

welcome adjustment. And the smaller groups combined with the fact that everyone comes from the same background makes for much better interaction I find, and much more open, lively discussion. And I feel a lot less inhibited to discuss things in a group setting.

The first semester also made her think about her own learning in elementary school in an effort to identify the kind of teacher she wants to be.

Being at the Teachers' College really has made me think about my elementary school time. --Just the smells and the songs that the kids sing when they're skipping, and things like that. I also remember what my elementary school teachers did that I did like and that I didn't like and I guess what I try to do is to be the teacher that I liked when I was in elementary school. I don't know how easy that will be, but it's worth a shot.

When asked for some feedback on the first semester, and input to help plan the next semester effectively, Julia responds carefully when she says

. . . people in my class are saying that they would like more practical work. . . and I think that this would be helpful. But in some ways I do hesitate to say, just, you know, forget all the theory and just do the practical work because I haven't really been out there, and although maybe a lot of this theoretical learning doesn't make a lot of sense to me now, it may next year. Although I do not realize it. So I do hesitate to say practical, practical, practical. I am sure that the staff at the College knows more about teaching than I do as well. And so I am somewhat hesitant to criticize in that respect.

Commenting specifically on the practicum experience Julia states,

the practical part, it has been very, very helpful, and I really like the fact that we do go out into the classroom very soon in September. At first, I saw that date, and I thought there is no way that I was going to be ready to go into the classroom. And it was quite an experience, but I think it was very helpful, and it made a lot of the theoretical work at the College make more sense to me.

Descriptive Instruments

The instruments used to provide additional insight into Julia as a person resulted in the following observations:

- a. The P.E.T. Profile (Professional Effectiveness Technologies, 1994e) indicates that Julia displays an undifferentiated profile. On the outside she displays extraverted feeling and extraverted intuition. On the inside, she appears as introverted thinking and introverted sensing. This makes for a potentially difficult and conflicting profile.
- b. In terms of self-directness, using the Guglielmino's SDLR Inventory (Guglielmino, 1977), Julia scores in the average range [211].
- c. The Kolb Learning Style Inventory (Kolb, 1984) indicates high scores on concrete experience and reflective observation. Given this profile, the style which seems to describe Julia's learning best seems to be that of divergent learning. Accommodative learning is indicated as a second.

Practicum Logbooks

Julia's practicum logbooks are hand-written. The cursive script is neat in appearance, consistent and quite legible. The flow of text appears easy and natural, as if writing the logbook was not such a chore once Julia got started. . ! Daily entries are approximately one to one and a half pages per day on average. An excerpt of the logbook, as well as an excerpt of the Reflections found in the content analysis may be found in Appendix F. Across the three practicum placements, the number of lines is consistent at about 45 lines per day.

To the reader, the logbooks give an impression of reliving one's day, and providing a running commentary on action and activities. A summary and comparison of the number of entries under the headings used in the content analysis may be found in Table 9. It should also be noted that upon invitation of the mentor teacher, the logbook of Julia's third practicum placement is in the form of a response journal. Since only Julia's section of the logbook is used in this study, the reading of the third logbook is a little like trying to make sense of a two-way telephone conversation by listening to one of the speakers only.

Instructor's Description

During the past year, it was a pleasure to work with Julia and to get to know her a little better. In class, Julia is quiet, and often will communicate her approval or disapproval by means of slight changes in body posture or facial expression. Spontaneous participation in class is somewhat hesitant. Occasionally, Julia gives the impression of "actively thinking while she is talking," almost as if the formulation of

her thoughts and converting those thoughts into speech, takes extra energy. I was therefore somewhat surprised when Julia presented me her learner description (which proved to be well formulated and articulate) in the form of an audiotape! Yet I realize that this ought not to have surprised me at all. After all, Julia has quite definite opinions on many matters, and is not afraid to be a unique individual. In addition, as she told me later, taping her thoughts was one way to make up for a slight bout of procrastination. After all, talking is faster than typing. During the course of the year, Julia's spontaneous in-class participation has increased. This development is appreciated by instructors and peers alike.

Table 9

Number of Entries under Content Analysis Headings - A Comparison: Julia - Practicum 1, II, III Logbooks

People:	Practicum #: I - II - III	Occurrences & Issues:	Practicum #: I - II - III	Comments & Reflections:	Practicum #: I - II - III
Students as a class	0 - 5 - 1	Personal (non- school)	0 - 0 - 1	Observations	14 - 7 - 6
Students as learners	4 - 6 - 0	Management & Discipline	11 - 31 - 5	Linking Theory & Practice	0 - 0 - 1
Students as individuals	2 - 13 - 13	Curriculum	1 - 0 - 0	Reflections:	21 - 57 - 39
Personnel Mentor teacher	9 - 13 - 2	Instruction	17 - 30 - 11		
Personnel Principal	0 - 0 - 1	School Policy	0 - 1 - 2		
Personnel Staff	1 - 3 - 1	Places & Contexts	8 - 6 - 2		
Personnel Other	0 - 0 - 0				
Personnel College faculty	3 - 6 - 1				
Total Entries:	19 - 46 - 19	Total Entries:	37 - 68 - 21	Total Entries:	35 - 64 - 46

Discussion of Content Analysis: Julia - Practicum I, II, III Logbooks

Under the heading People and specifically under the subheading Students, Julia's logbooks indicate a special interest in students as individuals. Especially in her second and third practicum placements, Julia's concern on how to reach specific students is noticeable.

Even more noticeable is the very high number of entries under Management and Discipline in Julia's second practicum. This "abnormally" [at least for Julia!] high number is mirrored with an equally high number of entries under the subheading Instruction during the same practicum placement. Combining these two factors, one is led to believe that the strains and stresses of working in a setting in which student behaviour leaves something to be desired, take their toll on the physical and emotional well-being of a student teacher.

Julia's own learning under the circumstances of her second practicum placement is reflected in the high number of entries under Reflections. Somehow, Julia has the ability and the tenacity to turn something which is potentially a negative experience, into a positive one. In second place, based on the number of logbook entries found under Reflections, are the references made during the third practicum. It is interesting to note that these references reflect a very positive learning experience.

Few or no entries are found under the principal, personal, curriculum, school policy, and the link between theory and practice.

Table 10

Reflections - Analyses & Critical Questions: Julia - Practicum I-III Logbooks

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
Flashback: Do memories of one's own schooling help or hinder one's learning-to-be-a-teacher experience?	1-002 <i>-Ahhh. My very first day in the classroom. It was much like going back in time- It's been so long since I've been in Gr.2. I was nervous, but went into the room knowing that it was my first time, and I was bound to make some mistakes. I tried not to take myself too seriously.</i>		
-The uncomfortable feeling that young students are ahead of your game: they know more than their teacher.	1-021 <i>- I was also able to observe the classroom schedule. During opening exercises, I was amazed by how many psalms and hymns the students knew by heart!</i>	-Recognition of one's own limitations- even in a Gr.2 class.	
	1-072 <i>-This caused me to think about what to do in such situations. Should extra work be give to the "quicker" student, should the "slower" ones take home homework?</i>		-Can student teachers be expected to address all learning needs? How can they develop this art?
- The reality of differences in learning is experienced first-hand.	1-077 <i>-How can classroom control best be maintained when some students are finished their work when others have barely started? How thought-provoking. . .!</i>	-The College discussions re: classroom management are beginning to make sense - they even provoke thinking. . .	
- Anticipation= key to planning as well as on-the-spot thinking.	1-121 <i>-One blunder which occurred during the lesson was that I had planned to read a poem from their readers with them (while I read from my teacher's manual). Although the poems had the same title, they ended up being quite different!</i>		
- Observation as well as reflection-in-action at work.	1-127 <i>-I didn't realize this until I was faced with 19 very confused little faces. The moral of the story: Always be prepared and check your resources carefully.</i>	- In learning about teaching, case studies and scenarios can never take the place of life experiences.	
- Comfort level is closely linked to "control."	1-241 <i>-I began to sweat as I wondered whether I had totally lost control.</i>		- How do student teachers know when they lose control?

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Self-evaluation; Hearing oneself go off track: Reflecting-in-action without quite knowing what to do next. - Recognizing students as fellow human beings. - Developing a sense of expected behaviours in "my" class. - Linking the current experience by comparing it to a previous experience. - Hearing the voices of the learners. - Fear of being wrong, not only in the eyes of the students but especially in the eyes of their parents. 	<p>1-292 <i>-I volunteered to do the Bible story today and it was a total flop. I kept losing my train of thought and the story was interrupted by several long---ish pauses! The entire time I kept thinking about how badly it was going, instead of concentrating on improving it while I still had the chance. Oh well, it was a learning experience. . .</i></p> <p>1-322 <i>-I also realized that it would be a good idea to buy myself a good whistle!!</i></p> <p>2-006 <i>-One of the first things I noticed, (and enjoyed about these older Gr.5/6 children) was that they had developed a sense of humour.</i></p> <p>2-016 <i>-I did notice that the students were very hyper and loud. "Hmmmmmm" I remember thinking "Not in my classroom. . . At least not this often!"</i></p> <p>2-063 <i>-One thing I did notice about the class that actually doesn't make sense, is Gr.2's seemed almost more mature than Gr.5/6's. Although Gr.2's are much more dependent, they rarely speak out while the teacher is talking or get up and run around the room.</i></p> <p>2-111 <i>-Many complaints were heard: "I can't concentrate when I don't have a book!" Am I an idealist or a pessimist to say I would hesitate to teach a novel study when there are an insufficient number of texts available?</i></p> <p>2-136 <i>- [re: Bible instruction] The largest fear that looms in my head is that I'll say something unscriptural/wrong which the students will take home with them and that their parents will "freak out"! (pardon the expression).</i></p>	<p>-Practice makes perfect or practice is painful?</p> <p>- Reflection-on-action can lead to very practical solutions.</p> <p>- A mentor teacher's standards may differ from the idealistic (?) standards of a student teacher.</p> <p>- Student teachers may need a well-developed sense of tactfulness when trying to fit into less-than-ideal conditions.</p> <p>- When certain aspects in teaching are of personal significance, they somehow are more important and matter more.</p>	<p>-What do we know about the importance of humour in a potentially stressful setting?</p> <p>-Is maturity directly related to age? What additional factors play a role? Do student teachers view "maturity" in behavioural terms of respect and obedience?</p>

(Table 10 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Recognition of one's own youth (and inexperience) in relation to an awesome responsibility. - Maintaining one's own sense of sanity as well as one's sense of humour in situations which somehow move from bad to worse. - Playing the role of teacher, while vividly remembering one's own role as a student in the not so distant past. - The determination of wanting to establish a positive sense of rapport is an encouraging sign. All is not lost yet. - The Extraverted Feeling person's need for establishing a relationship with the students. - Learning about oneself in the process. 	<p>2-208 <i>-The act of teaching is a job in itself- to have to deal with discipline problems in tandem with teaching can be exhausting even for a young thing like myself! The key seems: <u>consistency</u>.</i></p> <p>2-408 <i>-Some problems did arise. I wrongfully assumed there would be scissors and ample glue in the room. After a quick dash into a nearby classroom, the logistics were recovered. Naturally the students were loud, but I tried to be calm; afterall, art is supposed to be fun. I put on some music to soothe them (Vivaldi, anyone?).</i></p> <p>2-424 <i>-[re: trying to stretch the Book Fair activity, just to "waste time"] Although I gave the student the eye, I almost laughed aloud. . . remembering when I used to try the same stunts.</i></p> <p>2-504 <i>-More than anything in this Practicum, I realized that class management is a very important issue. Without class control, all teaching foci are basically out of focus. In order to remain sane and enjoy what I'm doing, I must have control of the classroom.</i></p> <p>2-512 <i>-[in this Practicum] I found discipline was difficult. It seemed that from the beginning everything (o.k., I'm exaggerating a <u>tiny</u> bit) was a struggle: Certain students <u>versus</u> me.</i></p> <p>2-525 <i>-I hope I'm not being an idealist in hoping that my students will like me and that we'll have a good relationship with one another!</i></p> <p>2-592 <i>-[re: overhearing a student say he's happy she's going] Surprisingly I did not feel overcome with grief at this statement.</i></p>	<ul style="list-style-type: none"> - Getting to know one's workplace takes some time. Never assume. . . - Putting ourselves in their shoes- Do we do it often enough? - Classroom management can make or break a practicum session- even a beginning student teacher. - Balancing one's ideals and dreams with the reality of experience. 	<ul style="list-style-type: none"> - Do student teachers "grow up quickly" as they move from the I-am-a-student to the I-am-the-teacher mode? Is this experience unique to the teaching profession? - Does the memory of one's own learning experience benefit us when dealing with our students? - How does one turn a situation which is bad from the very start into a positive learning experience?

(Table 10 continues)

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Critical reflection also helps us realize the "why" of a situation. - A tough exterior belies a soft interior. The teacher's mask may be in place, but the need for harmony still exists. - Recognizing that many factors play a role in the complexity of the teaching/learning process within the setting of the classroom. - A spontaneous response journal works well- especially for a student teacher who tends to procrastinate at times. - Reminiscing leads to identifying areas for growth. Extraverted people may also need to "control" the non-verbal messages they send. - The difference between foresight and hindsight. 	<p>2-593 <i>-I realize that this particular student disliked me because I was tough on his poor behaviour and I assume he was just waiting for the day I would be out of his hair!</i></p> <p>2-600 <i>-Immediately following this incident, other boys were overheard saying they wished I'd stay for the entire year (which made me feel good, although it was not an option I'd ever consider!)</i></p> <p>2-616 <i>-This experience also made me look forward all the more to having my own classroom with its own patterns and "feel".</i></p> <p>2-631 <i>-[re: not feeling as comfortable with this class] Unfortunately, I'm not sure why this is. Likely, it is a combination of the class itself, and their expectations, my constant struggle with the students to maintain class control, and perhaps even the age of the students.</i></p> <p>3-025 <i>-Bonjour! Forgive me if this is a little "scattered"! Thanks for the comments and advice! Yes, this journal was a great idea. Now I can look back at your suggestions for future lessons!</i></p> <p>3-031 <i>-The discipline thing is a difficult one for me. I need advice for alternatives to "nagging". I guess I just have to be more firm. I'll like to hear about your "poker-face" strategy. I tend to wear my feelings on my face. This could be a bad thing on occasion!</i></p> <p>3-042 <i>-The amount of teaching was fine, sometimes looking at a "fullish" schedule at the beginning of the day is intimidating, but one I got into it, it didn't seem too bad. I need lots of practice . . .</i></p>	<ul style="list-style-type: none"> - Feeling good about maintaining a sense of standard for behaviour in the classroom. - A sure sign of personal growth and determination to make it work. - Not only identifying areas for growth but also desiring the specifics which will help make this happen. 	<ul style="list-style-type: none"> - Are there other ways in which student teachers can experience the sense of "good, I'm doing the right thing"? - How can student teachers begin to answer their own questions? Can we help them in this? - Can all mentor teachers be asked to keep a response journal with a student teacher? Would this format work for all??? - Can a student teacher indeed be overloaded? Is this a matter of perception?

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Is this the beginning of what might lead to premise reflection? - Reflection-on-action may lead to process reflection. - Specific strategies are practised and they work! - The importance of stopping to take stock from time to time. - Restrospective character of logbook writing. 	<p>3-054 <i>-One thing I was somewhat concerned about today was incorporating the religious aspect of things into my social studies lesson. I was unsure how to go about it, so I left it out entirely- likely not a good habit to get into!</i></p> <p>3-060 <i>-How do you do this without it seeming thrown in for the sake of a requirement? I realize that sometimes it's easier. . . but with tornadoes? I guess I could have said that they show the amazing strength of God's power.</i></p> <p>3-079 <i>-Sometimes students make suggestions, and I think "Hey, why didn't I think of that?"</i></p> <p>3-133 <i>-I've been trying out the "pause and stare" strategy for dealing with those who are inattentive- it seems to be working! The power of silence, eh?!</i></p> <p>3-289 <i>-I did have an opening idea for "Sally Ann in the Snow" but forgot to write it down! Hmm. . . maybe not! I really need to write things down or I forget!</i></p> <p>3-368 <i>-So far I've been able to see a wide variety of activities here at ICS[school]: a P.A.Day, staff meetings, skating. . . and tomorrow an assembly and a music class with instruments!! Within your classroom, too, I've taught <u>lots</u> of different things! This is great, as it gives me a great deal of experience and shows me where my weaknesses lie. I've been very happy here!</i></p> <p>3-415 <i>-Wow!- Three weeks are already over, and this Journal is nearly full! Looking back. . . I'm not sure where to begin. I'll look back at my CCRTC journal.</i></p>	<ul style="list-style-type: none"> - The things we care about most are often the cause of our discomfort. - Identifying, posing and answering one's own questions is a good start. - The important recognition of silence as an alternative to nagging. -The importance of getting exposed to a wide variety of learning settings and experiences is a key component in the practice teaching experience. 	<ul style="list-style-type: none"> - Do teachers think they own the rights to knowing it all?? - Do teachers operate from a tightly written script? - Do we encourage our students to sum up their own learning from time to time? Do we do this ourselves??

Intuitive Analysis	Raw Data - Practicum Logbooks	Thematic Analysis	Critical Questions
<ul style="list-style-type: none"> - Beginning to recognize ideas which might work for you. - Developing criteria for "good teaching." - Developing criteria for "good mentoring." - Someone really cares about me as a person and as a future teacher. - The experience of a caring atmosphere in which a strong sense of cooperation and harmony exists is part of an Extraverted Feeling person's need. 	<p>3-425 <i>-I've got more than a full page of ideas ranging from discussing what Psalms/hymns were by whom, to your weekly spelling rituals and to how you praise and/or let students know you're unhappy with them.</i></p> <p>3-431 <i>-Your classes were always well-organized, and you always had perfect control of the students.</i></p> <p>3-434 <i>-You were a great mentor, because you always gave feedback with helpful suggestions. You also put a great deal of time into helping me along.</i></p> <p>3-439 <i>- You really made me feel as though I was worth spending time on! Not all mentor teachers would have spent as much time.</i></p> <p>3-444 <i>-So far, I can honestly say this has been my most upbuilding and informative Practicum. I'm sure there are lots of things I'm forgetting to say!</i></p> <p>3-448 <i>-Being a part of ICS [school] has been wonderful! The staff has been warm and supportive! Your class is full of interesting students, and I'll miss them as well as you, and the other ICS staff! All the best to you. J.</i></p>	<ul style="list-style-type: none"> - Practicums are necessary not only to practise the art of teaching but also to observe exemplary practice in action. - The importance of finding good mentor teachers. - The encouragement received from a positive practicum experience (especially after a less than positive one). 	<ul style="list-style-type: none"> - Do student teachers "evaluate" their mentor teachers? - What are the criteria for being a good mentor teacher?

Summary Statement: Julia - Practicum I, II, III Logbooks

Julia's practicum logbooks are characterized by her own sense and awareness of her needs as a learner. The entries mirror her quest to discover the difference between realism and idealism in the classroom. The presence of content reflection on a regular basis, as well as the occasional instance of process reflection and even a beginning of premise reflection are positive indicators for ongoing professional development and growth.

In keeping with her style described by Kolb as divergent, Julia is able to view concrete situations from many perspectives. Her interest in people, and the emotions she brings to bear to her work situation are evident from the logbook entries which plead for harmony and cooperation in the learning setting.

When asked about her fears and trepidations prior to the first practicum placement, Julia chose to focus on her own reactions to the learning experience, "My main concern here is that I'll be able to accept criticism and learn from it, rather than taking it too personally." The craft of teaching also intimidated her somewhat, "I'm also somewhat afraid that I'll completely botch a lesson. "On a more practical and sensible note, she adds, "I'm also a little concerned about finding my way back to civilization on the weekends. . .".

It was interesting to note that upon her return after the first practicum, her fears had not really materialized, mainly because "my mentor teacher and I had a good relationship and I was able to learn from her comments." With respect to the "botched lesson," Julia noted that indeed she had experienced this too, but "I could see where I had made errors and could learn from them. A flop of a lesson does have its merits!"

Overall, Julia describes the practicum experience like "being a caged animal in a zoo- under constant scrutiny!" When asked to describe teaching, she drew on her culinary expertise when she wrote, "Teaching is like cooking. You need several ingredients and can't skip steps to get good results- but no one cooks in the same way!"

Julia also shared her feelings about keeping a logbook, and compared it to going to the doctor. "It's hard to get up and go, but after you do, you feel much better."

When asked specifically about the place and function of linking theory and practice, Julia identified the theory introduced in educational psychology with her experiences in the classroom when she recognized the effectiveness of students learning by doing rather than the teacher-directed approach. She also made reference to a curriculum course, when she acknowledged that she had experienced how difficult it can be when you teach a unit designed and developed by someone else. Using yet another culinary parallel, she writes, "I can now see how we like to 'bake our own bread' rather than using someone else's units all the time."

CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND IMPLICATIONS

Summary

The chapter intends to summarize the findings of this study and provide suggestions for implications for practice and theory. Since Chapter 4 contains an extensive description of the data, as well as comprehensive summaries for each of the five participants, the focus of this chapter will be on the general findings and implications which emerged from this research.

Conclusions

Initially, the study was designed to answer several questions related to valuing and encouraging critical reflection in pre-service teacher education, by means of a close examination of the place and function of practicum logbooks as used at Covenant Canadian Reformed Teachers' College. Organized under three headings, the conclusions may be summarized as follows:

1. Describing reflective practice in pre-service students:

From the intuitive and thematic analyses based on the logbook entries, we may conclude that the terms "reflection-on-action" and "reflection-in-action" first introduced in writings of D. A. Schön (Schön, 1983; 1987) continue to function as useful descriptors of the type of reflection which occurs in the work of a student teacher during a practicum placement. Based on the findings which emerged from 15 logbooks, we may conclude that the reflection-on-action is much more prevalent than the reflection-in-action. This observation can be explained in two different ways.

First of all, an explanation may be found in the nature of logbook writing. By definition, logbooks are written after the fact, and the format of "in retrospect" writing may naturally favour the reflection-on-action type of critical reflection. In the second place, the shift in emphasis and frequency from reflection-on-action to reflection-in-action has been identified as one of the characteristics which helps describe the continuum of teacher education (Bullough Jr., Knowles & Crow, 1991; LaBoskey, 1994). The frequent use of reflection-in-action distinguishes competent and experienced teachers from novice teachers. By implication therefore, it follows that student teachers who are at the very beginning of the teacher education continuum are not expected to display frequent reflection-in-action episodes in their practicum logbooks.

Similarly, when using the terminology "content, process and premise reflection" (Cranton, 1994, pp. 170-172), one could note from the practicum logbooks that content reflection is the most prevalent of the three types of reflection, followed by some process reflection. Premise reflection is evident in its very beginning stages in only some of the logbooks. Generally, the frequency of process reflection increased along with the practicum experience. The few students who displayed the beginnings of premise reflection did so during the third practicum placement.

This seems to indicate a strong individual developmental component as students go through this process. Again, one could speculate about the reasons for this observation. Perhaps the main factors are experience, courage and expertise over time. Student teachers who are at the very beginning of their pre-service teacher education program are quite unfamiliar with the educational content and process, the aspects

involved in the complicated and interactive process of teaching and learning. It is not surprising, therefore, to discover that students in this position do not yet have the grasp required to begin to formulate the questions which aid the process of critical reflection. Perhaps the generally recognized existence of some type of learning taxonomy will serve as a parallel in this discussion. Basic to the taxonomy of learning is the content, often characterized by "what" questions (note the similarity with the notion of "content" reflection). The next rung on the ladder is often described as the process, and in this instance, "how" questions help provide a focus (note the similarity with the notion of "process" reflection). Lastly, the most complex aspect of learning involves some type of synthesis and evaluation. Here, the "why" type of question (note the similarity with the notion of "premise" reflection) may serve us well. Learning theorists who subscribe to such a hierarchical structure of learning will hasten to add that although there is a type of sequence built into this structure, the learning steps themselves are not exclusively sequential.

Increased opportunity of experience which leads to expertise will serve to deepen and increase a student teacher's ability to move from content and process reflection toward premise reflection. Experienced teachers whose work is characterized by exemplary practice, are often engaged in premise reflection. Their understanding of practice against the background of their understanding of the theory allows them to engage in premise reflection, and in turn often leads to re-affirmation or reformation of current practice.

2. Are all students capable of critical reflection and reflective practice?

Can knowledge of pre-service students as learners (e.g., personality

type, risk-taking, learning style or self-directedness) "predict" the degree of reflective practice?

From the entries in the logbooks, it became clear that some students are much more introspective and reflective than others. However, here also the degree of reflection deepened as the year progressed. From a "blow-by-blow" account found in some of the first logbooks, to the thoughtful description of one's own learning flowing from the practicum experience, one can note that not only are students capable of reflective practice, but in some instances use critical reflection to help shape future action. Interestingly enough, critical reflection as the type of thinking which serves to challenge notions of prior learning was more clearly evident in responses to specifically designed reflective tasks than in the actual practicum logbooks. In making this observation, one wonders whether "prescribed reflection" by means of carefully worded questions is a genuine and valid form of reflective practice. Do the students respond to my questions as if these are test questions and the object is "to figure out what she is after, what she wants us to write etc.," OR are these personal reactions from within, responses in reaction to a specifically reflective task in the theoretical context of the Teachers' College, away from the hustle and bustle of the practicum classroom?

When considering aspects of self-expression in relation to personality type and learning style, one may conclude from the writing of the five students that logbook writing is a foreign experience. Spontaneous use of diaries or journals as a means of self-expression is not practised among the five participants. Yet amid the grumblings concerning the task of writing runs the common thread of the notion which puts the

logbook on the same footing as brussels sprouts, spinach and dentists: You may not like it, but it's good for you. In the context of preferred modes of self-expression, it would seem that personality type and learning style could serve among the potential indicators which help shape the manner in which the expression of critical reflection can best be encouraged. However, great care must be taken to allow the use of personality type and learning style to function as windows which broaden rather than restrict one's understanding of student teachers as learners.

3. What do the analyses tell us about critical reflection as it emerges from the practicum placements by means of the logbooks?

For me, as a researcher-instructor, the study confirmed several notions which I had embraced in an intuitive manner. For example, the many references to things which matter most directly. Logbook entries provide evidence of aspects of immediate relevance to student teachers:

Under the heading People, the immediate relevance is found in the many entries related to students (as a class and as individuals), several entries with respect to the mentor teacher, and a few entries related to college faculty. Of much less relevance are parents (hardly mentioned at all, except as chaperons on a classtrip), principal (unless s/he came to visit the classroom), and staff (other than providing indicators of school ambiance).

Under the heading Places and Contexts, the entries describe features of the classroom (idea: I like the way. . .), limitations which have a direct bearing on the teaching itself (e.g., absence or lack of gym facilities restricts you in your choice of phys. ed. activities on very cold wintry days; presence of a gym makes for difficult

"control"). Very few entries describe the physical bricks-and-mortar aspects of the building, lay-out etc.

Under the heading Occurrences & Issues, classroom management is the one that stands out most clearly as a making or breaking of effective instruction. A student teacher experiencing difficulty with classroom management also raises questions with respect to authority (mentor teacher/student teacher. . . how far can I as student teacher go?); the temporary nature of a practicum assignment (I'm only there for two weeks. . . what can I really do?); the inability of putting one's own stamp on a class (If this were my class, I would. . .). The issues (especially classroom management) shift dramatically from one practicum experience to another. As such, are logbook entries primarily linked to the setting and context, rather than to the student teacher as a person and learner?

Along a similar vein, the absence of references which obviously do not matter a great deal at this time in the life and work of a student teacher, are telling indicators of what is not quite so important at this time. For example, the lack of references to the Principal, to other adults or to school policy may well indicate a lack of immediate relevance to the unique position of a student teacher whose position in the school is a temporary one.

What did surprise me, however, was the absolute lack of entries which refer to the curriculum as the broader background to the "what, how and why" of teaching, as well as the total absence of links between theory and practice. From my own vantage point, I know that instructors constantly make reference to in-school practice when illustrating a theoretical point in the teaching-learning process. Just before a practicum

session, such references become even more explicit, "Next week when you go into the schools, you will undoubtedly note. . . ; Watch how. . . is done; Be prepared to tell us about . . . based on your experiences in the classroom."

When I shared my shock and disappointment over the absence of the theory-practice link in the logbook writings with the five participants, they were not at all shocked or disappointed! As a matter of fact, the feeling that "Here at the College we worry about theory - Out in the schools we have our hands full worrying about teaching" was shared unanimously among the students. Illustrations such as "It's like travelling along two completely different roads. Both lead you to the goal, but you can only travel one at a time. . . so why worry about the other?" served to confirm the sense that once the landscape becomes more familiar, the interrelationship between the two roads will fall into place. Once we have gained a certain degree of automaticity and we no longer worry about the little things, then we'll think about theory **and** practice. Now we as student teachers can only handle one at a time.

Then there was the discovery of the things student teachers did not write about. Obviously, that which is not written cannot be analyzed or interpreted, yet what does it mean, for example, that a student teacher makes absolutely no mention of a special needs student who takes such a special place within the classroom context? What do "the stories we do not tell" tell? Paraphrasing the words of the Jewish psychiatrist when trying to understand the burdens carried by many children and grandchildren of Nazi perpetrators, is there such a thing as "trying to understand what one is afraid to learn about?" (Bar-On, 1991, p. 321).

Implications and Recommendations for Practice

At Covenant Canadian Reformed Teachers' College, the use of practicum logbooks appears to function well, and ought to be maintained as a means to encourage critical reflection in student teachers.

The open-ended, nonprescriptive nature of the logbook assignment is a valuable asset in encouraging deep and deepening reflection. To encourage such deepening critical reflection further, instructors ought to make the various levels of reflective practice obvious in all instructional settings. For example, the terminology "reflection-on/in-practice", as well as "content, process, premise reflection" ought to be basic vocabulary in all teaching-learning settings characterized by a spirit of inquiry.

Of importance in this context is the notion of "to walk the talk": As teacher educators, we must model our reflective practice before our students. We must be seen to practice critical reflection ourselves in a variety of different ways.

Recognizing the importance of personality type and learning style in our work ought to encourage us to experiment with other forms which give evidence of reflective practice. The narrative of inquiry as a means of communicating reflective practice ought not to be restricted in any way to logbooks alone. (Video)tapes, photo albums and scrapbooks, cartoons, response journals, audiotaped interviews and conversations are all valid ways in which critical reflection can be shared with others. Student teachers ought to be given a choice to propose a means of communicating their learning in the practicum setting in a manner which makes their voice heard in a most unique way.

Mindful of the reflexive aspect of our work, implications and recommendations

for practice also include a follow-up to the critical questions raised in this course of this study. At Covenant Canadian Reformed Teachers' College, the critical questions which flow from the Reflections can form a forum for ongoing discussion between faculty members within the context of the College, between faculty members and student teachers as individuals and as a group, and between faculty members and the practicum school community, the principal, mentor teacher, etc.

Implications and Recommendations for Theory

The present study also pointed to the "snapshot in time" effect of attempting to describe a learning process. An important aspect within the broader context of teachers as reflective practitioners as well as lifelong learners when developing a spirit of inquiry is the notion of critical reflection itself. What characterizes critical reflection? Where does it lead?

Within the framework of teacher education, growth and development, individual concepts such as critical reflection, reflection-in-action and premise reflection have been discussed in educational literature. The literature review included as Chapter 2 in this study contains several examples. In many cases, practical suggestions which lead to better and improved educational practice have been offered. However, it would appear that little has been written with respect to possible connections which may exist in various combinations between critical reflection, reflection-in-action and premise reflection. If such links exist, how do they function? Do they result in reflexive practice? Is there such a concept as "meta-reflection," a reflecting on/in reflecting? Can we even begin to identify and isolate the links which

exist between the different levels of reflection? Does the identification and isolation of such links lead to better teaching-learning practice?

Are the award-winning practitioners always the thoughtful and reflective practitioners? How do elements such as the social fabric of one's life- and work environment, one's understanding of self, one's sense of mission, of goal and direction help shape critical reflection?

Implications for Further Research

Within the context of the reflective practitioner as a lifelong learner, the implications for further research are not difficult to establish. If one recognizes that teacher education merely begins with the pre-service teacher training program, one also ought to recognize the importance of ongoing in-service education. Teachers who have some years of experience ought to be invited to take up the challenge and communicate the experience of critical reflective practice to each other. Narrative inquiry does have a place within a staffroom setting. Let the stories be told and the voices be heard (Brunner, 1994; Clandinin, 1986). Promoting growth through dialogue journals has been practised in several schoolboards (Keating, 1994). Today's technology may well encourage dialogue via electronic means. Perhaps the missing links between theory and practice will be forged in the process.

More immediately with respect to the plight of the five participants: If pre-service teacher education is only the beginning of a long learning journey, a way ought to be found to continue in this process together. How does a teacher's critical reflection deepen during the first 2 years of teaching? What are the critical points, the

benchmarks along the way which make us stop and take note of our own learning progress? What are the factors which may hinder us from stopping and taking note of our own learning progress?

Practising Reflective Practice: A Personal Account

This study would not be complete without adding a few words taken from the narrative of my own experiences as a reflective practitioner throughout this process.

As a teacher-educator, one of my personal goals in my work is to be a model for my students. How can I encourage them to be models for their students, if I am not a model for my students? How can I value and encourage critical reflection in pre-service teacher education, if I do not strive to be a reflective practitioner myself?

In the course of the past 12 months or so, the place of logbooks in the learning of our students has received a very special share of my attention. As is the case with anything that is placed under the microscope of special scrutiny, one discovers many new facets of the process of logbook writing, reading and interpretation.

The typical cover-to-cover reading which I used to apply in the context of the follow-up provided for our students after each practicum placement changed quite dramatically when I began to look for themes in the context of the content analysis. Even the very act of placing individual logbook entries under the various categories and subheadings put a dramatic spin on each logbook. Suddenly I began to take note of patterns I had never noticed before and I began to discover the stories as well as the gaps which emerged from most logbooks. This discovery did not occur in isolation. Throughout the year, the conversations with my two full time colleagues

were often centred around the "logbook exercise" as a way to "get at our students a little better". I thank my colleagues for their patience in listening to my discoveries, and their willingness to reflect collectively and collegially on our action which includes the use of practicum logbooks. I also experienced that once you have looked through the microscope of scrutiny, things are never quite the same as before. This was illustrated by one of my colleagues when he exclaimed, "Even I think I'm looking at these logbooks differently now!"

Perhaps this study functions to confirm the place and purpose of practicum logbooks in the course of studies offered at Covenant Canadian Reformed Teachers' College. Perhaps this study acts as a catalyst to strengthen the intent of practicum logbooks as we value and encourage critical reflection in pre-service teacher education.

This year has been a special year for me as a learner and an instructor. Together as instructor and students, as researcher and co-researchers, we could share our learning. To Tracy, Linda, Tanya, Mike, and Julia I express my deep appreciation for your cooperation, courage and encouragement. I extend the invitation to keep in touch. Let your voices be heard as we continue to share our stories.

"Having made a discovery, I shall never see the world again as before. My eyes have become different; I have made myself into a person seeing and thinking differently. I have crossed a gap, the heuristic gap which lies between the problem and discovery."

Michael Polanyi, 1962, p. 143

Postscript:

Throughout the research, I have endeavoured to be a researcher-educator, a practitioner who reflects in and on her own inquiry and who draws on those reflections to design educational experiences for others.

Hopefully the five student-participants in this study will be the first of many to benefit from this approach.

May this study serve in a small way, to assist the instructors in giving voice to all students who enroll at *Covenant Canadian Reformed Teachers College* as we

"tell the next generation"

[Psalm 78:4].

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Appendix A

Standard Instruments - A Summary

1. P.E.T. Type Check

Description:

Based on Carl Jung's theory of psychological type, the P.E.T. [Professional Effectiveness Technologies] Type Check is designed to help one better understand oneself by pointing out the unique characteristics of one's personality.

The P.E.T. Type Check consists of a self-response questionnaire of eighty items. The responses are scored and graphed. In order to ascertain an accurate interpretation, participants may be asked to read the P.E.T. General Description of Psychological Type.

Using the categories identified in the personality theory of Carl Jung, the description which results from the P.E.T. Type Check identifies the two basic attitudes of extraversion or introversion as well as the four functions of thinking, feeling, sensing and intuition.

It is important to note that the P.E.T. Type Check does not aim to label or categorize people, but desires to point out typical differences among people. The identification of attitudes and functions is used to reintegrate the differences into a holistic personality profile.

Application:

In this study, the P.E.T. Type Check was used to provide yet another window into the person of the participant as learner and student teacher.

2. Kolb Learning Style Inventory

Description:

Based on D.A.Kolb's notion of Experiential learning: Experience as the source of learning and development, the Kolb Learning Style Inventory consists of a self-response questionnaire containing nine items. Each item consists of four terms to be ranked in order of descending relevance to one's own learning.

The Inventory responses are scored, and plotted on a graph to indicate the preferred learning style of the participant.

The four learning modes described by Kolb as concrete experience, reflective observation, abstract conceptualization and active experimentation form the basis of the description of the learning style types. Four learning style types are identified as convergers, divergers, assimilators and accommodators.

Application:

In this study, the *Kolb Learning Style Inventory* was used to help the participant gain a better understanding of aspects which potentially shape and influence one's experience of and outlook on learning.

3. **Guglielmino Self Directed Learning Readiness Scale**

Description:

Recognizing that the degree of self-directedness in one's learning affects one's approach to learning, Guglielmino developed a Self-Directed Learning Readiness Scale as part of her doctoral dissertation. This Self-directed Learning Readiness Scale is a Likert-type scale which consists of fifty-eight items.

Based on a standardized scoring procedure, the test yields a numerical score ranging from 141 to 285, with the mean established at 214.

Important to this Self-Directed Learning Readiness Scale is the underlying notion that self-directed learning exists along a continuum and is present in each person to some degree. Equally important is the belief that the capacity to engage in self-directed learning can be developed in each individual.

Application:

In this study, the Guglielmino Self Directed Learning Readiness Scale served to measure an individual's current level of readiness to engage in self-directed learning and was intended to provide the participant with a benchmark along the continuum of self-directed learning.

Appendix B

Excerpt: Tracy - Practicum III Logbook [TJ3-269-297]

Wednesday January 31 1996

Well here it is, practicum is half over. I have
 270 to admit that so far I'm not really having such a
 great time. Maybe it's because I'm concentrating a lot
 on maintaining control in the classroom. Wow that's
 really a theme to this logbook isn't it? But really
 it's getting on my nerves. It's not that I don't think
 275 that my lessons aren't going relatively well, but when
 I'm thinking about how to keep them listening, stop
 talking (!!) + pay attention it's easier to concentrate
 too much on that aspect of teaching.

I think that since that part of teaching is always
 280 foremost in my mind, that even when they are behaving
 pretty well it's harder for me to see because I only see
 what's wrong. For example during math today, they
 were doing their homework, some of them got finished
 early and they were talking. To me because I was
 285 thinking about it they seemed louder than they actually
 were. Talking with Mr. W. , who's a much
 more objective presence in the back of the classroom, he
 thought that the class went okay.

Today I got to teach the grade 5 class as well.
 290 It's actually quite a new experience because they're such a
 different class. My class is very smart, loud and excitable
~~noisy~~ This class is very laid back, and not quite as
 smart. They have different problems in this classroom.
 Three of the girls have formed a kind of clique with
 295 the purpose of acting stupid. They'll look at the head
 of the group and take the cue from her. They've
 even taken to talking weird in class. It's actually

Appendix B

Excerpt: Tracy - Content Analysis - Reflections [TJ3-199-310]

- 3-199 -I suppose I should have pointed out the words which would have given them [the Gr.6 students] difficulty, but I didn't.
- 3-235 -That's one thing about teaching: You get to learn all the stuff you were supposed to learn in elementary school. I finally know what the Secession of 1834 was all about!
- 3-250 -Actually, I quite enjoyed this lesson: the students looked as if they were attentive and really following along, and I enjoyed the material as well.
- 3-257 -Seriously, I think that they're always more attentive during a "story" class like bible or church history. They don't have an opportunity to talk like they do in math.
- 3-250 -When I want feedback from them, that seems to be the time where they can take advantage and talk to each other while another classmember is speaking.
- 3-265 -Well, I know that they're not behaving like I want them to. I just have to find ways that they're thinking about the lesson, and not having a really good time in class.
- 3-269 -Well here it is, practicum is half over. I have to admit that so far I'm not really having such a great time. Maybe it's because I'm concentrating a lot on maintaining control in the classroom.
- 3-273 -Wow, that's really a theme to this logbook isn't it?
- 3-274 -But really, it's getting on my nerves. It's not that I don't think that my lessons aren't going relatively well, but when I'm thinking about how to keep them listening, stop talking (!!!) and pay attention, it's easier to concentrate too much on that part of teaching.
- 3-279 -I think since that part of teaching is always foremost in my mind, that even when they are behaving pretty well, it's hard for me to see, because I only see what's wrong.
- 3-282 -For example, during math today, they were doing their homework, some of them got finished early and they were talking.
- 3-284 -To me because I was thinking about it, it seemed louder than they actually were. Talking with Mr.V., who is a much more objective presence in the back of the classroom, he thought the class went o.k.
- 3-304 -I'm going to continue with what I was going to write yesterday. Practicum now is over half done, and I'm having a harder time connecting with the kids.
- 3-308 -I've been thinking about why this is so. I mean, I think that I clicked with my two previous classes pretty quickly, but this time it seems separate.
- 3-310 -Before I give the wrong impression, I don't hate these kids and I don't dread going to school in the morning- I just don't have the total connection yet!

Appendix C

Excerpt: Linda - Practicum III Logbook [L3-83-104]

Journal Entry #3

Today is Wednesday January 24, 1996. Today I had three big lessons to teach: Bible phonics and math.

- 85 — *The Bible lesson went extremely well. I taught the lesson about David and Goliath. The students were encaptured. It is a wonderful story to tell, because it has a lot of action and emotion. I think the students enjoyed having a Bible story taught by a different person who had a different approach. One little girl came up to me after the lesson and told me, "That was a good Bible Story". I must say that I loved it.*
- 90 — *Because the story was very dramatic the students listened very well and recalled all the factual information as well as the main point that the faith in God is the most important thing, better than power, strength and money. There are a few things that Mrs. Vandelden did point out to me to watch out for, such as using simpler vocabulary. The students did not know what taunt means. I will have to discuss this*
- 95 — *with them tomorrow. Mrs. Vd also told me that I show not pace back and forth in the front of the room. I not sure on my feelings about this. In some ways I think it is good for you can see the students eyes following you and breaks any monotony, but maybe not.*

- The next lesson was math. I was a basic review lesson, for nothing new was*
- 100 — *introduced. We just reinforced what we had previously learned. The lesson started by counting in t 5s 10s and 25s. After we played the train game, the students love it. Then we played store. I had a number of items priced. I would chose a student to come to my store and pick and item. They would have to pay for it, by picking the correct money out of the tray. They would tell they class how they payed for it and*

Appendix C

Excerpt: Linda - Content Analysis - Reflections [L3-087-149]

- 3-087 -I think the students enjoyed having a Bible story taught by a different person who had a different approach. One little girl came up to me after the lesson and told me, "That was a good Bible Story". I must say that I loved it.
- 3-092 -There are a few things that Mrs. Vd.[mentor teacher] did point out to me to watch out for, such as using simpler vocabulary. The students did not know what 'taunt' means. I will have to discuss this with them tomorrow.
- 3-095 -Mrs. Vd[mentor teacher] also told me that I should not pace back and forth in the front of the room. I not sure on my feelings about this. In some ways I think it is good for you can see the students eyes following you and breaks any monotony, but maybe not.
- 3-107 -I also think they needed this review time, where in nothing new was introduced. The lesson went well.
- 3-108 -However, sometimes I wish there was two of me to run the class. I had was too busy trying to get everyone to visit my store that I was not watching the children write on the board.
- 3-118 -I think the whole class enjoys LA for it is a time a sharing and aesthetic listening. After we had a work sheet that the students completed and we took up, which gave us more opportunity to discuss the story.
- 3-121 -All in all I had a very enjoyable day. I am getting used to the way this class room is run and I am feeling more and more comfortable.
- 3-123 -Today I taught a full morning. It was very enjoyable.
- 3-124 -I love going from one class into the next instead of starting in the middle of a day.
- 3-125 -I did opening devotions, which went considerably well since it was my first time.
- 3-126 -I need to watch the time though. It is amazing how much children can dottle.
- 3-130 -Today I worked on not pacing and on making sure my voice was loud enough as well as using simpler vocabulary. I defined the difficult words, thereby hopefully building their vocabulary.
- 3-133 -I discovered that only two students knew what the word taunt meant, so I defined it for them and explained part of yesterday's story again. I felt the lesson went well.
- 3-144 -Although we did some fun activities with the material that the students enjoyed I think the students are ready to go on to something new.
- 3-149 -We stop frequently to discuss the story. The children real enjoy this time and we have amazing discussions stemming from the story.

Appendix D

Excerpt:

Tanya - Practicum III Logbook [TV-497-525]

Friday February 9, 1996.

- Today was my last day! The concert last night was great but I'm tired. At least I had an easy day today. I taught Creative Writing (actually just giving a topic 'Prince Lazy-Bones' and supervising). It amazes me that some students are quite creative while others find it such a chore. I sympathize b/c I always hated open ended creative writing assignments. I ~~tho~~ thought a web might help those who have difficulty but some still needed help. They wrote what I had down for a web and that was it no details. Then there are others who just keep going!
- I also finished up my French today. We completed assignments in the workbook. I think they have learned → they even like French! I tried to play a game in every class even if it was only for 5m.
- I also gave a spelling dictation - that was it. Most of the day was finishing off odds and ends. I made sure all my marking was finished - handed in marks. cleaned off my desk - that sort of stuff.
- I'll miss the class but I'm happy that this practicum is over - family and friends are a ~~major~~ primary concern this weekend. I can hardly wait to get back to the college to see everyone again. 3 weeks is a long time!

Appendix D

Excerpt: Tanya - Content Analysis - Reflections [TV3-382-314]

- 3-382 -After French, it was science test time. I was amazed at how quickly some children write tests!
- 3-384 -I also marked these tests tonight. (I always hated when teachers took forever to return tests!)
- 3-406 -One thing happened today of interest: We have a bible test on Thursday. I had not been reviewing bible stories, i.e., getting children to hand them in. So I collected all, and corrected the wrong answers.-- 9x29 students. You do the math!! I will never do that again, although you can certainly see which students are organized!
- 3-423 -Towards the end I was losing their interest. Should I have made it a game? (I did it with science)
- 3-426 -I suppose. . . But I think it's sad that everything needs to be a game for them to be interested.
- 3-434 -Communication Skills was on verbs. Mr.H. and I discussed the value of today's lesson. I think it is safe to say we saw very little value in it.
- 3-460 -Tonight I prepared my bulletin board-- tomorrow I will put it up. . . hopefully it looks o.k. I'm not creative, so it probably will be a little boring. But it's my first. . . maybe I worry over nothing.
- 3-465 -Wow! Only two days left. I think I will miss this class. Hey, if I get the Gr.4 position. . . this could be **my** class next year. . . I could handle that!
- 3-476 -Today we had a bible test. So many students would ask for answers. I was surprised, but I also felt mean for saying "I can't answer that".
- 3-481 -One thing I have noticed in this class is that they don't know their skills very well, i.e., adding and subtracting. I think I would spend classtime on drilling. Even if you made it into a game. . . Their skills are quite weak- it's an area that needs improvement.
- 3-499 -I taught creative writing (actually, just giving a topic '*Prince Lazy Bones*' and supervising). It amazes me that some students are quite creative, while others find it such a chore.
- 3-503 -I empathize, because I always hated open-ended creative writing assignments.
- 3-520 -I'll miss the class, but I'm happy that Practicum is over-- family and friends are a primary concern this weekend.
- 3-523 -I can hardly wait to get back to the College to see everyone again! Three weeks is a long time!

Appendix E

Excerpt: Mike - Practicum III Logbook [M3-272-297]

Thurs Feb. 1/86.

Today Mr. showed me his method of teaching a bible lesson. As I observed I really noticed how the students reacted so well to his style of teaching. I guess, along w him, they also get accustomed to a certain method. I wouldn't exactly say that this is my method of choice, but then again I don't have much choice in the matter. I'll give it a go tomorrow.

200 Mrs. V. H. came today to observe. Once again I wasn't teaching a formal lesson but we were continuing our analysis on Comparison Shopping (math). She did point out some things however that I was doing (both
205 good and bad) that I wasn't necessarily even consciously aware of. However when I do think about it I realize what I may be doing wrong, and how I can improve.

I feel the hardest thing to do, and especially in
240 this class, is to be consciously aware of what the students are doing. I don't even know if it is possible, but it would be nice to know if they are 'getting' what you're teaching or not. I know this can be done by circulating
295 through the classroom, but I also know that certain students are good at faking it. I guess whatever I don't pick up, the test will.

Appendix E

Excerpt: Mike - Content Analysis - Reflections [M3-154-348]

- 3-154 -I am getting a little discouraged however, when I see Mr.D. taking students aside during Language arts to clarify some of the math.
- 3-176 -There were a few students who hadn't completed the assignment. Mr.D. dealt with them right away before I had a chance.
- 3-209 -I feel undermined with Mr.D. in the room, since he seems to deal with all disciplinary problems.
- 3-219 -I was given ample time to read through some science material which Mr.D. gave me.
- 3-230 -Up until now, Mr.D. hasn't given me a lot, however, the stuff I now have will help out.
- 3-233 -The afternoon was kind of special. Mr.D. plays the guitar, and for music class they sang some familiar songs while he played.
- 3-245 -I think Mr.D. thought I could just wing it without any idea. He does it so well.
- 3-246 -He [mentor teacher] gave me textbooks, but that doesn't help. I don't think he realizes how we are starting from scratch.
- 3-272 -Today, Mr.D. showed me his method of teaching a bible lesson.
- 3-273 -As I observed, I really noticed how the students reacted so well to his style of teaching.
- 3-275 -I guess, along with him, they also get accustomed to a certain method.
- 3-276 -I wouldn't exactly say that this is my method of choice, but then again I don't have much choice in the matter. I'll give it a go tomorrow.
- 3-300 -I think the reason for this was because I basically mimicked Mr.D's method.
- 3-313 -Since Friday is a rather busy day for me, I didn't really get a chance to talk to Mr.D. until the end of the day.
- 3-333 -Today, also brought about an interesting situation. My mentor teacher has the habit of intervening into my lessons.
- 3-337 -However, he [mentor teacher] feels the need to put his two-cents in at times.
- 3-339 -At first I didn't mind, but now I feel it takes the flow away from my lesson. Today this happened in science. He [mentor teacher] came into the class as we were taking up homework and as I was about to explain something- he did.
- 3-343 -However, he [mentor teacher] had things reversed.
- 3-344 -He [mentor teacher] couldn't understand why they couldn't get it. I was silent.
- 3-345 -He [mentor teacher] left and let me work my way out of the mess. I was glad he did this. I told them he had things slightly backwards, and proceeded to explain it properly.

Appendix F

Excerpt:

Julia - Practicum III Logbook [J2-390-419]

Nov. 14/95

390 Today I taught the entire afternoon.
The language arts lesson ~~asked~~ mirrored
- yesterday's as far as organization and
activities went.

- I had the chance to teach art
395 for the first time. Mrs. Smid asked me
to do a "popcorn art" activity with the
- students. Although "popcorn art" seemed
somewhat of an oxymoron to me, it did
- seem like a fun task. Images of children
climbing the walls (desks, chalkboards, window
- did enter my mind when I was planning
my lesson. Thus some of the enjoyment
- that an art lesson should be was
replaced by fear... at least on my part.

405 In any case, I explained the activity.
What I should have done was made an
example the night before... however...

Some problems did arise. I wrongfully
- assumed there would be scissors and
410 ample glue in the room. After a quick
dash into a nearby classroom, the
- logistics were recovered. Naturally,
the students were loud, but I tried to
- be calm; after all, art is supposed
415 to be fun. I put on some music
to soothe them (Vivaldi, anyone?)

- At around 3:00, the class was
allowed to go downstairs to peruse
the books at the Bremer Book Fair.

Appendix F

Excerpt: Julia - Content Analysis - Reflections [J2-366-314]

- 2-394 -I had the chance to teach art for the first time. Mrs.S. asked me to do a "popcorn art" activity with the students. Although "popcorn art" seemed somewhat of an oxymoron to me, it did seem like a fun task. Images of children climbing the walls (desks, chalkboards, windows) did enter my mind when I was planning my lesson. Thus some of the enjoyment that an art lesson should be was replaced by fear. . . at least on my part.
- 2-405 -In any case, I explained the activity. What I should have done was make an example the night before. . . however. . .
- 2-408 -Some problems did arise. I wrongfully assumed there would be scissors and ample glue in the room. After a quick dash into a nearby classroom, the logistics were recovered. Naturally the students were loud, but I tried to be calm; afterall, art is supposed to be fun. I put on some music to soothe them (Vivaldi, anyone?).
- 2-424 -Although I gave the student the eye, I almost laughed aloud. . . remembering when I used to try the same stunts.
- 2-428 -Because there was little time left after the Fair, Mrs.S. popped numerous bowls of left-over popcorn for the class to eat. Although this did greatly increase the rowdiness level, I couldn't really blame the kids, because they were not given anything to do. . .Hmmm. . . Not to say that this gave them a license to go crazy. . . tWas the end of another day.
- 2-438 -Not a good day. Today was the day of Mr.V.[CCRTC faculty]'s second visit and things did not go well.
- 2-454 -After approximately 45 minutes, the review was complete. The review sheets were assigned as homework, simply because no classtime remained. This was Mrs.S's suggestion. . . Is this o.k. for Gr.5 and 6? I guess it is a form of study!
- 2-501 -Discipline is now a topic I think about often. - and a valid one to raise in Teaching Workshop!
- 2-504 -More than anything in this Practicum, I realized that class management is a very important issue. Without class control, all teaching foci are basically out of focus. In order to remain sane and enjoy what I'm doing, I must have control of the classroom.
- 2-512 -In the C. situation, more specifically, I found discipline was difficult. It seemed that from the beginning everything (o.k., I'm exaggerating a tiny bit) was a struggle: Certain students versus me.